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MEDICOLEGAL PROGRESS IN INQUESTS OF FELONIOUS DEATHS: WESTMINSTER, 1761-1866

GARY I. GREENWALD

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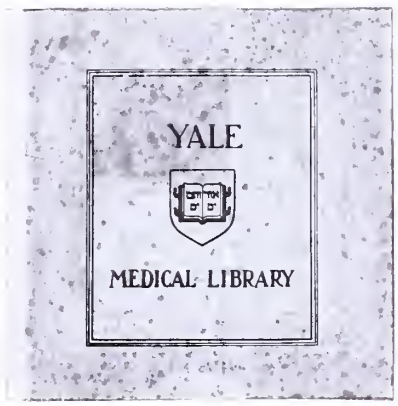
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MEDICOLEGAL PROGRESS IN INQUESTS OF FELONIOUS DEATHS: WESTMINSTER, 1761 - 1866

by

Gary I. Greenwald

A Thesis

Submitted to the

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In Partial Fulfillment of the Requirements

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Dedicated to

Dr. Thomas R. Forbes

Emeritus Professor of the

Yale University School of Medicine

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INTRODUCTION

Every society requires investigation into the unexpected or unexplained deaths of its citizens in order to determine the cause of death, circumstances and responsibility, and hopefully the knowledge to avoid repetition. The development of forensic medicine (the application of medical knowledge to legal problems) in England lagged behind the major countries of Europe. The coroner's inquest served as the basis of medicolegal investigation into cause of death. If the case did not reach the coroner's attention or the inquest failed to ascertain a felonious cause of death, the case proceeded no further. Therefore, it is obvious that the failure to have medical testimony and a proper medical examination threatened the functioning of the entire system.

This study entailed investigation of the unpublished inquests and depositions conducted by the coroner of the city of Westminster between the years 1761 and 1866. These documents are stored in Westminster Abbey because the Church historically comprised not only the religious center, but also the seat of many government functions. This period, 1761 to 1866, was selected because it begins prior to the development of any organized forensic medicine in Britain

and ends after numerous major advances, such as the establishment of chairs and courses of study in forensic medicine at the universities and the development of a significant British literature on the subject. The official inquests were printed forms, approximately 12 inches by 13 inches, with spaces allotted for filling in handwritten basic information and a summary of the cause of death. Nearly all inquests contained handwritten depositions consisting of a verbatim transcript of the oral testimony given during the inquest. Several inquests also contained miscellaneous data, including police notices of death, burial orders, and even a rare professional chemical analyses for poison.

Surprisingly little investigation except for that of Bailey[1] and Forbes[2] has been made into the coroner's inquests of the seventeenth to nineteenth centuries as a source of historical information, and almost nothing has been written on the application of the developing principles of forensic medicine visible in these inquests. This thesis entails a brief review of the historical development of the English coroner system and forensic medicine, followed by a discussion of the special problems faced by the medical witness of the eighteenth and nineteenth centuries. In this study of inquests between 1761 and 1866, 2687 cases were analyzed. These comprised consecutive series of cases at approximately thirty year intervals and included all cases from 1761 to 1765, 1800 to 1803, 1835 to

1838, and 1865 to 1866. Five years were analyzed to add significance to the earliest period, 1761 to 1765, because the total number of cases was small. Conversely, at the end of the period, 1865 to 1866, only two years were analyzed because of the large number of cases. Sections on homicide, suicides and infanticide (non-accidental violent deaths) are analyzed with respect to the evolution of medical evidence in these inquests during the four periods. These chapters also include discussions of the limitations the coroner faced obtaining inquests, the society's attitude on suicide, and the special problems regarding infanticide.

HISTORICAL BACKGROUND

Brief History of the English Coroner System

"Any history of the development of legal medicine in England is inseparable from the history of the coroner system";[3] therefore, this section begins with the English coroner. Official medicolegal investigations probably first began around the twelfth century with the establishment in 1194[4] of the office of the coroner or custodian of the Crown pleas. The office was established primarily to supply revenues for the Crown and not as an instrument of justice. The coroner was responsible for determining the circumstances of death, because felonious deaths required forfeiture to the Crown of the felon's chattels (movable property), and all deaths required payment equal to the deodand (the value of the instrument literally causing the fatality).[5]

There were numerous other fines as well. Some fines depended on the time and place death occurred. If the body was found during the day and the felon escaped, the town was held responsible and fined. If, however, the murder occurred at night, the town was not held responsible. Therefore, juries generally decided the body was discovered at night. The body was also examined for evidence of having

been moved, because fines were assessed against the locality in which the murder was committed.[6]

The coroner's duties were previously performed by several officers appointed by the local sheriffs.

> There was considerable corruption amongst the sheriffs and certain Crown revenues were being diverted into their pockets. One purpose of the coroners undoubtedly was to watch the sheriff to prevent him acquiring money for his own purposes. It is reported, however, that a century later the sheriffs were watching the coroners, who, in their turn, were feathering their own nests.[7]

The killing of Normans by their Saxon subjects, after the Norman Conquest, was a common occurrence. Because medical examinations and autopsies were nonexistent and, therefore, cause of death difficult to determine, Norman leaders imposed "Lex Murdrorum," a fine on any town where a Norman was found dead regardless of cause. Furthermore, any corpse unidentifiable because of mutilation or decomposition was presumed Norman, "presumption of Normancy." To escape the fine, evidence of Saxon heritage by the town had to be presented, known as "presentment of Englishry." In 1340, because of the crippling fines from the large number of deaths from famine, "Lex Murdrorum" was restricted to felonious killings only.[8]

During the middle ages, the requirement for holding the office of coroner was reduced from knighthood to simply owning property in the county. The medieval coroner held

significant power, and in addition to investigating deaths, he had numerous other responsibilities including investigation of non-fatal injuries (for assignment of fines), checking claims of buried treasure, receiving appeals and abjurations, and declarations of outlawry. Gradually all these responsibilities were stripped from his office except for investigation of sudden and suspicious deaths.

Medicolegal investigations in the medieval period began with the finding of the body. The "first finder" was required to "raise the hue" (attract the attention of passersby). Rarely was the "first finder" actually the true first finder of the body since "finding" the body involved a relative penalty requiring appearance with the coroner at the next Eyre (meeting of the justices) and meant one or two days' absence from work. Failure to appear resulted in a fine but was often preferable to lost work.[9]

Removal of the corpse without notifying the coroner incurred a steep fine. The town was also responsible for guarding the body and keeping it in its original location until the coroner arrived. There are reports of cases becoming health hazards because the coroner did not arrive for days or even weeks.[10] Members of the four neighboring townships, the finder, witnesses present at the time of death, and family members presented to the coroner all known facts. Unlike the rest of English jurisprudence based on the adversary system, the coroner's inquest was

conducted entirely by the coroner. Early juries were composed of males over twelve years old, and the coroner was powerless to penalize failure of a summoned juror to appear other than to present his name for a fine at the subsequent Eyre. The jury discussed the evidence with the coroner and rendered a verdict. They also appraised the felon's goods and determined the deodand.[11]

The medieval coroners were elected by the knights and freeholders of the county and provided with no compensation for their services. Eventually, the Act of 1487 was passed and provided for fees for inquests out of the proceeds derived from the felon's chattels or fines of the township. Because only felonies provided reimbursement, the coroner avoided deaths without obvious trauma or foul play, and had a vested interest in making suspicious deaths appear felonious. To combat this, the Act of 1508 imposed on the coroner a fine for failing to hold an inquest in appropriate cases.[12]

The English coroner system reached its lowest point in the seventeenth and eighteenth centuries. An Act of 1751 provided for reimbursement of all inquests, felonious and non-felonious. However, the justices, who determined which inquests were appropriate to be reimbursed, defeated the purpose of the legislation by limiting payment to only obvious violent deaths.

> Sir Mathew Hale, a legal luminary of those times held to the principle that only a death with overtones of criminality gave the coroner jurisdiction.13

There was a continuous feud in many areas between the coroner and the justices and other county officials, who obstructed the coroner whenever possible. The justices not only repeatedly refused the coroner payments for inquests but, furthermore, attempted to prevent his notification of sudden deaths. The High Court upheld these decisions and ruled inquests should be held only in unnatural deaths in which external marks of violence could be found.[14] Post-mortem examinations and medical testimony were generally deemed unnecessary and physicians avoided involvement since there was no provision for remuneration.

In the early-mid nineteenth century, major steps toward improving and modernizing the coroner system began. These efforts were initiated partially because of the large scale poisoning of children in order to collect "burial money" (insurance) from burial clubs.[15] The most critical reforms were two pieces of 1836 legislation. The first finally provided fees to physicians for medical testimony, autopsies, and toxicologic examinations, though these payments still had to be approved and were interfered with by the justices. The other, the Birth and Death Registration Act of 1836, required reporting of deaths within five days, and disposal of the body was prohibited without a registrar's

certificate or a coroner's burial order. An 1859 Royal Commission condemned the justices' interference in the inquests, and an Act of 1860 established a regular salary for the coroner making him more independent. In addition, a select committee recommended that the coroner hold inquests into all violent deaths, all natural deaths of unknown cause, and all deaths with any suspicion of criminal involvement. These recommendations provided the essential components of the Coroner Act of 1887 and established the basis of his present day authority.[16]

The Coroners Amendment Act of 1926 removed the old land owning requirement for coroners. It had become obsolete with many coroners maintaining the requirement simply by owning a burial plot in the county. The Act also required the coroner to have had five years' experience as either a barrister, solicitor, or physician. The coroner was allowed to preside without a jury except in transportation, accidental, work related, felonious, or prison deaths. Unfortunately, the coroner could request any medical practitioner, regardless of his experience, to perform an autopsy and toxicological analysis. This allowed untrained physicians to render opinions and destroy the possibility of examination by expert witnesses.[17] Later legislation provided for autopsies by trained pathologists when possible and properly equipped mortuaries for post-mortem examinations.[18]

Brief History of English Forensic Medicine

Medicolegal study in England lagged behind the continent. Though autopsies were done routinely in the seventeenth and eighteenth centuries on the continent, the untrained coroner's visual examination was considered sufficient in England during these centuries. The coroner was responsible for measuring and evaluating wounds despite the absence of relevant training.

Published work on forensic medicine in England was very sparse prior to the nineteenth century. In 1702 Richard Mead,[19] Physician to Her Majesty, published A Mechanical Account of Poisons including five essays dealing with the viper, mad dog, opium, venomous exhalations from the earth, and poisonous airs and waters. He administered mineral and vegetable poisons to animals, described their effects, and performed autopsies after they died. William Farr in 1788 published Elements of Medical Jurisprudence[20], a translation of a book published in 1767 by J. F. Faselius. Farr maintained Faselius' "order of nature," beginning with pregnancy and ending with death. He omitted Faselius' chapter on torture and added his own chapters on madness and public health. The first original English work in forensic medicine is credited to George E. Male, who wrote The Epitome of Judicial or Forensic Medicine[21] in 1816.

In 1807 the Crown established its first chair in forensic medicine in Edinburgh. At Guy's Hospital, in 1834, Alfred Swain Taylor was appointed the first professor of medical jurisprudence. After this, numerous other chairs were established and the medicolegal literature continued to advance.

Despite these beginnings in medicolegal writings, academia, and legislation (outlined in the previous pages), there still remained significant hurdles to overcome in the functioning of the coroner system. This is well reflected in a statement made in the private journal of one of the justices commenting on the appointment in 1839 of Thomas Wakly, founder of the Lancet and the first medically qualified coroner, "It is not one case out of twenty that any medical skill is required, the cause of death being of itself sufficiently obvious."[22] This attitude and other obstacles severely handicapped the functioning of the coroner system and reduced the likelihood of uncovering many felonious deaths. These obstacles and further reforms will be discussed in detail under homicide, suicide and infanticide.

The Medical Witness

English writings on forensic medicine began around the turn of the nineteenth century.[23] Most early writings concerned the scientific aspects of legal medicine. However,

several authors specifically addressed the application of medicolegal knowledge to medical testimony. This was necessary because the medical man faced testifying with great trepidation for many reasons. These trepidations included recognition of the importance his testimony might have, his probable lack of expert knowledge in forensic medicine, the publicity, and the lawyers whom he believed sought victory rather than truth. In addition, Guy[24] noted in 1864 that guidance for testifying was needed since there were 17,000 premature sudden and violent deaths and

> it follows that if the duty of attending at inquests were distributed equally, each member of the medical profession would attend at least one inquest every year.

The general practice was for the coroner to use the medical practitioner involved in the case, and if there was not one, he selected the nearest medical man, "whether he had any exposure or not," and often trusted an important and delicate pathological inquiry to the hands of one who had probably never before made an inspection.[25] The jury, if satisfied with the explained cause of death provided by the medical witness, was able to request that the coroner summon other legally qualified practitioners named by them to perform a second post-mortem or chemical analysis.

The Westminster inquests provide significant detail about the quality of medical testimony. Testimony will be presented in pertinent cases later in this thesis, and

recommendations regarding medical testimony by contemporary authors will be presented here. Four authors, Percival,[26] Smith,[27] Guy,[28] and Woodman[29] wrote concerning medical testimony around the period of this study, and gave numerous recommendations and precautions. These writers borrowed heavily from each other and the following is a synthesis of their comments and advice. A medical witness was responsible for knowledge encompassing a wide range of questions including anatomy, chemistry, medicine, surgery, obstetrics and toxicology. Unlike higher court cases in which the medical witness had weeks to prepare, for the coroner's inquests there sometimes was a few hours or even less. Neglect of a summons resulted in a five-pound penalty and more damaging, a reprimand from the judge if the case proceeded to the criminal courts. The medical witness could not refuse attendance because of unfamiliarity with the case, nor could he refuse to perform a post-mortem examination or analysis of the stomach and intestines for poison.

Authors of this period recommended a number of preparations for testimony. One such contemporary suggestion was that when observing facts which later might be relevant in a legal inquiry, the physician should take notes. Notes should also be transcribed on post-mortem examinations. A second recommendation was that the witness should become as acquainted as possible with all the facts of the case and perform a thorough autopsy. "Do not for example. . . neglect

the head because death was a sudden one and you found heart disease. Remember apoplexy (hemorrhage) may coexist with or be caused by poisoning."[30] In practice, post-mortem examination frequently did not exhibit such thoroughness.

When more than one medical man was to give evidence, the authors recommended they confer with each other prior to testifying. This was not to establish a conspiracy but "intelligent and honest men, fully acquainted with their respective means of information, are much less likely to differ, than when no communication has previously taken place."[31] Percival cited a case with contradictory testimony from two physicians. One had more extensive information on the case, but the other's opinion carried because he was the more esteemed physician. Had they conferred first, the miscarriage of justice might have been avoided. Furthermore, when medical men gave differing opinions, very often the result was harmful both to the case, the medical men, and the profession. Dr. John Gregory commented that quarrels among physicians,

> when they end in appeals to the public they generally hurt the contending parties; but what is of more consequence they discredit the profession and expose the faculty to ridicule and contempt.[32]

Occasionally conflicting testimony between different medical experts was evident in the inquests of Westminster and will be cited in the next chapters.[33]

The witnesses were advised to distinguish clearly between fact and their own opinions. For example, "There can be no doubt that belladonna and prussic acid are deadly poisons in certain doses, whilst the precise manner in which they kill is as yet still a matter of opinion."[34] The distinction between opinion and fact was clearly evident in many of the Westminster depositions. The medical witness invariably stated in cases of probable infanticide, "it is my opinion" that the child had either lived or not lived.

Several writers make strong statements about avoiding "misplaced humanity." Medical evidence was not to be twisted or withheld because of personal disagreement with the severity of the penalty facing the accused, or for fear that the medical testimony might be responsible for a false conviction.

> The most human witness may consider himself as sacrificing private emotions to public justice and social order. . . the dread of innocent blood being brought upon us by explicit and honest testimony is one of those superstitions which the nurse has taught and which a liberal education ought to purge from the mind.35

It is rather cold heartedly claimed that the falsely convicted prisoner could console himself in that

> he falls for his country, whilst he suffers under the operation of those rules, by the general effect and tendency of which the welfare of the community is maintained and upheld.36

However, among the inquests, instances of shading medical testimony to elicit a certain verdict were not uncommon. It was almost the rule in cases of suicide to suggest insanity without the slightest evidence in order to spare the victim a verdict of felo de se.

Though the witness could not refuse to perform a post-mortem examination if he did not feel competent, it was suggested that he convey this to the coroner. No such cases are evident in the Westminster inquests. If asked to do an autopsy while the inquest was held,

> /the witness/ ought to protest against this, as it is impossible to make a careful examination of the whole body in less than an hour, and if it be possible daylight is always preferable. The yellow tinge given to the skin by certain poisons, and the same tint produced by disease (e.g. jaundice) may easily escape notice by candle or gaslight.[37]

The question of withholding comments made to the medical practitioner in confidence by patients was uncomfortably addressed too.

> The highest legal authorities have decided that no special privilege is attached to medical men with regard to secrets of a professional nature . . . However, many medical men would prefer to sacrifice their personal liberty to their honor.

This conflict between the practitioner's legal obligation and moral obligation was never resolved, and the quote ends with the line, "our duty here is simply to state the law."[38]

Many of the conflicts and attitudes surrounding the medical witness are also apparent in these early texts. Percival states,

> It is a complaint made by coroners, magistrates, and judges, that medical gentlemen are often reluctant in the performance of those offices, required from them as citizens qualified, by professional knowledge, to aid the execution of public justice. These offices, it must be confessed, are generally painful, always inconvenient, and occasion an interruption to business, of a nature not to be easily appreciated or compensated. But as they admit of no substitution, they are to be regarded as appropriate debts to the community, which neither equity nor patriotism will allow to be cancelled.[39]

Smith took exception to the complaint of the coroners.

> /The coroners/ astonish me. Do they find their brethren the attorneys, more ready to perform offices for which 'as citizens qualified by professional knowledge to aid the execution of public justice,' it is well known that it is of little use to call them?[40]

He further complained of "the incessant demands under which medical practitioners suffer; being in some situations, absolutely oppressed by the frequency of calls."[41]

As already mentioned, practitioners were anxious to avoid testifying. For the medical witness, there "is hardly a situation that so powerfully menaces his reputation or where so much personal uneasiness is endured."[42] The witness was warned to consider his statements carefully and to treat the inquest with sufficient seriousness.

> Nothing can be more important than the duty which a medical man has to perform upon such occasions. His dictum may be the influencing consideration that directs the issue. What can he think of himself, should it be discovered that he acted from ignorance, or some other impulse under which it was, on his part, wrong to be?43

To emphasize the importance of accurate testimony during the inquest, the consequences of subsequently discovered errors, should the case go to trial, are examined.

> Then comes the excruciating inquiry: Q: Why did you not say so before the coroner? A: I did not then know that it was so. Q: Why did you not know? Were you not then supposed to be as competent a member of your profession as you are now? It was your business to know. Where were you educated? What was the course of your studies? Who were your teachers? How long did you attend on their instructions? and What testimonials have you received as to your fitness to exercise the functions, of whatever character it may be, by which you are designated and reputed? These, and other awkward interrogatories, await the foolish man who runs into the clutch of a prisoner's counsel by conduct such as that against which I have uttered a warning.44

Because the auspices of the inquest were so unimpressive, it was important for the witness not to be deluded into laxity by the commonness of his surroundings.

> The medical practitioner, living in the neighbourhood where the inquest is going on, will in all probability find that the court, or tribunal, or persons to whom he is immediately answerable, are composed of those familiarly known to him; and very likely they may rank a step or two lower in the scale of society than he is habituated to associate with. The place of

> assembly is probably a mean apartment in a village ale-house, redolent of nicotine and the beau-ideal of a 'Crowner's quest,' is very much the same as that of a country club; saving that in the latter, the business is possibly discussed with more patience, and the truth is more frequently elicited.[45]

Taylor stated that "the ignorant and uneducated class of persons who often constitute the jury as well as the circumstances under which the inquiry takes place are not calculated to inspire great respect.[46] Furthermore, Smith delivered a scathing comment on the motives of those involved.

> Too often are important grounds for inquiry slurred over: and evidence is frequently taken in such a way as manifestly shews that it is not wanted, any further than may be necessary to make a sufficient shew on the face of the proceedings. This being accomplished, if no troublesome person be present to disturb the even tenour of the way, and no unlucky juryman of sufficient intelligence to confuse the affair by putting an awkward question, the coroner tells the jury what they ought to do; the jury do as they are bid, and every body gets away in good time for dinner, or for supper, as the case may be.[47]

Many experts recognized that special qualifications should be required by law in order to be a medical witness as was true of several of the other European countries, where special medical witnesses were appointed (the earliest in France in 1603).[48] Medical witnesses in England were so inconsistent and variable in quality that Smith felt they were generally held in disrepute. The need for

an increased emphasis on forensic medicine was evident within the profession and in the universities.

> /The ridicule of the legal profession and the public towards the medical witness/ is one of the evils which our inattention to forensic application of science has introduced. . . It is a slur upon us that nothing can remove but a general and accurate application of the study of forensic medicine.[49]

The growth of forensic medicine between 1761 and 1866 was evident in the Westminster inquests. Early in the century studied, a medical witness at the inquest was a rare occurrence. Furthermore, of the thirteen (1761-1765) inquests that did involve medical men, six were apothecaries and one was a chemist (pharmacist). By 1800-1803, half the inquests had medical depositions and these were nearly all surgeons. In the later two periods, 1835-1838 and 1865-1866, the absence of medical testimony was unusual and it was not uncommon to have members of the Royal College of Physicians depose as well as surgeons, and even local experts who were lecturers at neighboring hospitals.[50] The medical witness involved in the case was nearly always the doctor for the deceased, but in cases where the deceased had no medical practitioner, the coroner would summon a respected medical man of the community and the parish would pay his fee. Usually, only one medical witness deposed at an inquest, but occasionally two and up to nine testified.[51] Through the century, the ascending quality of the expertise was obvious and in 1865, Dr. Alfred S. Taylor performed the

chemical analysis (appendix) and the detailed report was submitted in the inquest.[52]

Post-mortem examinations, however, were probably the best indicator during the nineteenth century of the efforts being made to apply the principles of forensic medicine. Autopsies increased through the century from three in 1761-1765, to twenty-seven in 1800-1803, 201 in 1835-1838, and 396 in 1865-1866 (see chart). This represented an increase from less than one per year in 1760 to 103 per year in 1865.[53] Although the number of inquests per year increased tremendously, the number of autopsies increased far more significantly. The autopsies were almost exclusively performed by surgeons and the surgeons attended the inquests as well. This is at variance with Smith who vehemently complained that often medical students, "the least qualified," were summoned to do the autopsy and give evidence.[54] Autopsies were most frequently performed on accident and illness victims. This is easily understood because accidents and illness accounted for the largest groups in the inquests. That autopsies were performed as frequently on victims of illness as accidents may be due to the fact that death from illness could be much more subtle, therefore requiring a post-mortem examination to answer remaining questions. Autopsies on homicides, suicides, and infanticides will be discussed in detail in their respective chapters.

INQUESTS CONTAINING AUTOPSIES

	Accidents			Illness			Found Dead			Homicide			Suicide			Infanticide		
	T	Au	%	T	Au	%	T	Au	%	T	Au	%	T	Au	%	T	Au	%
1761-5	114	--	--	49	1	2	18	1	6	11	--	--	72	--	--	11	1	9
1800-3	134	5	4	164	21	13	20	--	--	4	1	25	93	--	--	5	--	--
1835-8	536	104	19	416	66	16	62	10	16	9	2	22	165	13	8	8	6	75
1865-6	410	166	40	209	164	78	88	49	56	6	1	17	73	8	11	10	8	80
Totals	1194	275		838	252		188	60		30	4		403	21		34	15	

T = total number of inquests
Au = number of inquests containing autopsies
% = per cent of inquests containing autopsies

The lack of autopsies in the earlier periods was probably as much a reflection of the contemporary attitude toward autopsies in general as it was a reflection of the youth of forensic medicine as a field. Anatomy professors until 1832[55] often had to resort to body-snatching to obtain sufficient corpses for instructional purposes; the only bodies otherwise available were executed felons, who after execution were to be "dissected and anatomized" as part of their punishment. In one remarkable inquestion of 1801, "divers mangled bodies" were found in a house, apparently for the instruction of anatomy. A man testified that,

> In an empty house which is called the Bohemith Head and has been empty about four months I saw a man's head and shoulders in the window. . . Another person with me went into the said house into the parlour and there we saw several human bodies upon a table and also the floor and in the yard we saw a whole skeleton and parts of divers other bodies which were in a putrid state. We likewise saw instruments used by surgeons in dissecting bodies in the parlor window. . .
>
> Mr. Carper, a surgeon, has often sent a porter with dead bodies in a box from hospitals to the said house where he and some of his pupils used to come and dissect them and used from time to time to bury the flesh in the cellar.[56]

The difficulty surgeons encountered attempting to train themselves partially accounts for why so few autopsies were performed in the eighteenth century. Probably few surgeons were well-trained, particularly for a scientific and accurate post-mortem examination, and the attitudes of the time were

not conducive for a coroner to order frequent autopsies. However, through the century, autopsies did improve tremendously in quality as well as quantity and this, as well as the increased sophistication in the testimony of the medical witness, will be apparent in the following chapters of non-accidental violent deaths.

HOMICIDE

The three categories of homicide under English law are justifiable, excusable, and felonious. Justifiable homicide includes cases of homicide resulting from prevention of a serious crime, e.g. defending a victim from murder, or in the performance of the law as in capital punishment. Excusable homicide applies when there is no criminal intent, e.g. if the death occurred in self-defense or with misadventure. Felonious homicide refers to either manslaughter, an unlawful killing without expressed or implied malice, or murder in which malice is expressed or implied.[57]

Because infanticide represented a distinct problem, elicited specific legislation, and received special concern in the developing field of forensic medicine, homicide and infanticide will be dealt with separately. The distinction between an infant and an adult made in the inquests was sometimes inconsistent, but in general an infant was less than ten years of age and an adult anyone over ten years of age.

The charts following enumerate the years, sex, cause of death, and category of homicide committed in the years studied. Overall, there were more male victims than female victims.[58] For male victims, manslaughter was the more frequent charge (fifteen manslaughters and four murders),

HOMICIDE

	Sex	Mans	Mur	Just	Chan	CT	Blow	MS	Shot	Veh	?
1761-5	M	5	2	--	1	4	1	1	2	--	--
	F	1	2	--	--	1	2	--	--	--	--
1800-3	M	1	--	1	--	--	--	--	1	--	--
	F	--	3	--	--	1	2	--	--	--	--
1835-8	M	5	1	1	--	2	3	2	--	1	--
	F	--	1	--	--	--	1	--	--	--	--
1865-6	M	4	1	--	--	--	--	3	--	--	2
	F	--	1	--	--	1	--	--	--	--	--
Totals	M	15	4	2	1	6	4	6	3	1	2
	F	1	7	--	--	3	5	--	--	--	--

M - male; F - female; Mans - manslaughter; Mur - murder; Just - justifiable; Chan - chancemedley (excusable); CT - cut throat or stabbing; MS - miscellaneous assault; Veh - vehicle; ? - cause of death unknown

whereas for females, murder was the more frequent (one manslaughter and seven murders). There was no obvious reason for this, but perhaps jury sympathy for the female victim aroused the more serious charge. Forbes[59] combines his list of adult homicide victims and infanticide. Therefore, direct comparison is difficult, but one significant difference is nevertheless apparent. Vehicle accidents were the second largest cause of felonious homicide in his study, whereas only one case of felonious death here involved a vehicle. This case involved a fight that erupted between two men, one in a chaise and the other in a horse-drawn cart, trying to pass each other on a narrow road. One struck the other with his whip, fell out of the chaise and was run over. All other unintentional vehicle accidents were listed simply as accidental deaths rather than as homicide.

Essentially all cases recorded resulted from violent attacks, particularly blows and stabbings. Homicide during all of these periods was very literally a violent crime. Since medieval times, the coroner and jury were required to view the naked body and it was the coroner's responsibility to look specifically for wounds and bruises, measuring the breadth, depth, and width of each.[60] This, for many years, represented the entire post-mortem examination. Hunnisett states that

> if this appears to have been a rather rough and ready post-mortem examination, it was nevertheless probably adequate, for a glance through any roll of Crown pleas shows that there was nothing subtle or sophisticated about medieval homicides.[61]

This, however, seems to be very circular reasoning, especially for the period of this study. As will be discussed later in the chapter, the coroner was only informed of externally obvious violent deaths, despite the 1836 Birth and Death Registration Act and law providing for medical witness fees. Certainly, the coroner was not informed of many homicides because subtler methods of killing were employed. The lack of emphasis on forensic medicine and the dearth of forensic technology was not surmounted in many of the inquests. With the prevalence of poisoning seen in infant deaths and suicides, there was no doubt numerous undetected homicides secondary to poisoning. Dr. William Farr argued, writing in 1838 in the Registrar General's first report,

> it is not improbable that a certain number of cases of poisoning escape, undetected by coroners and juries, who can be expected to know little of the symptoms either of poisons or of disease, and are rarely assisted, as in other countries, in their decision by information which a careful examination of the body and an analysis of the contents of the stomach would furnish.[62]

It is worth noting that even at the end of this period, 1865-1866, no subtle causes of homicide were uncovered.

Of the total thirty homicide inquests, eleven contained no depositions. A few of these specifically noted that the depositions had been turned over to the Old Bailey court house for future trial. The reason some felonious homicide inquests contained depositions and others had been forwarded to the court is not clearly apparent, and it did not depend on the category of felonious homicide charged.

Despite the fact that homicide constitutes perhaps the most serious crime, and was doubly important to the Crown because conviction led to the forfeiture of the felon's "goods and chattel," surprisingly little medical expertise was used to elucidate these cases. While at least some of the eleven cases that were sent to the Old Bailey no doubt included medical testimony, especially in the later periods, nevertheless, of the nineteen remaining cases, only four contained medical testimony and autopsies. None of the 1761-1765 cases contained any medical testimony and only one 1800-1803 case contained a post-mortem examination. This was in an 1801 murder case in which Richard Stark was charged with the murder of his wife whom he cast to the ground and kicked in the head and belly for having pawned his breeches. The physician who was called approached the parish beadle and conveyed to him that the body should be examined. The beadle, in turn, applied to the coroner for the authority to have a post-mortem examination performed. This single post-

mortem from the first two periods proved the woman had died from the beating.

> I proceeded to examine the body, which had suffered many marks and bruises on the head and face, the left side of the belly and on her legs and left hip. Upon opening the belly we observed that a quantity of blood exceeding two quarts was effused in its cavity and on the removing of which blood we found all the contents in a sound and healthy state, excepting the spleen, which was ruptured in two places, and perceived the bleeding to have come from thence, and the injury which was done to the spleen we had no doubt was the cause of her death. We remarked that the bruises on the left side of the belly were situated exactly over the injured part of the spleen..
>
> Verdict: she died of the ill usage she had received.

An interesting footnote to this case was a note that one of the jurors had to be excused because he "became unwell after viewing the body."

Another case which made use of the medical expertise of the time occurred in 1835 and involved a twenty-seven year old male who had been in a fist fight. He complained of a black eye and severe headache. He improved, but ten days later developed a severe earache and became delirious. Yellow discharge exuded from the ear. Leeches and a strong "aperient" (laxative) were recommended by his physician. A friend "blew tobacco smoke in the ear to relieve it. . . He had had earaches before the fight especially when he caught cold." Charles Hawkins, the house surgeon at St. Guys' Hospital, testified that

> on examination, it was found that his death was produced by an abscess on the brain, . . . in the middle of the left hemisphere. . . A discharge from the left ear might be occasioned by the abscess. The abscess in question in my opinion was not recent. I found a communication from the abscess through the bone to the ear.

It is unclear from the deposition whether Hawkins means to imply that the abscess was more chronic than the two-week period since the fight, and that, therefore, the violence was not the cause the death. The verdict was manslaughter. In this case as with many others, the autopsy involved only the part of the body in question, here the head and neck.

Sometimes, even though medical evidence was obtained, it was lackluster and incomplete. The demonstrated lack of detail provided evidence for an absence of sophistication and interest on the part of the coroner and his jury, and of minimal efforts by the surgeon. In an 1836 case of manslaughter, despite the serious nature of the offense and the obvious doubt as to the true cause of death, the medical testimony was limited to the following:

> I examined the head and brain. The fracture of the skull must have been brought on by violence. In all probability, his death was produced by the injury, but there is a possibility that he might have been attacked by apoplexy (hemorrhage).

There was no further information or detail requested or obtained and the jury seemed satisfied with the verdict of manslaughter.

There were a few cases in which the final verdict was not homicide, but the question of homicide had been raised

and medical testimony was instrumental in the determination of the case. An early case in 1762 involved a soldier who had died in a hospital. A gentleman, Sir Henry Friessing, requested an inquest and claimed it was his understanding the man had been beaten, and had been buried without an inquiry. The body was exhumed and an inquest held. Depositions included a nurse and surgeon's mate belonging to the hospital who described the patient's symptoms prior to death as well as his treatment, and denied any signs of a beating. There was no reference whatsoever to an external examination or autopsy of the disinterred body, perhaps because the body had significantly decomposed. The verdict was natural death. Though the body may not have undergone a post-mortem due to putrefaction, legally it still had to be exhumed in order to hold the inquest.[63] In a later case (1800), the verdict appeared to depend directly on the medical testimony. The victim was struck with a violent blow on the side of the head and complained of a headache. Five days later "he was much worse, his look was bad and his breath much affected and had difficulty speaking." William Morris, a surgeon, found no marks of violence. He opened the body and found "the lungs were diseased and he died a natural death." The verdict again was natural death. This autopsy is certainly not very impressive in detail, but the incidence and sophistication of medical testimony was improving and certainly made strides from the 1760's where medical evidence

was rare indeed. However, the past example does not imply that greater emphasis on medical evidence was the rule in all cases by 1800, or that it would be even sixty years later. A notable example is an 1865 case of a twenty-three year old male found dead in the street "with a fractured skull and no evidence how produced." Even here where the cause of death remained an open question, there was absolutely no medical evidence, much less an autopsy.

An 1801 case demonstrates, furthermore, that the coroner and jury could twist or use the medical testimony to reach the verdict they desired. One victim was struck on the head in a fight. He died in the hospital. George Frederick Sockley, house surgeon at St. Guys Hospital, testified that the victim

> was brought in sensible with a large contusion and small wound. He was intoxicated. Mr. Griffiths, surgeon, trepanned him when he went into a stupor four to five days after the incident. I have examined him since his death and found a quantity of matter within the dura-mater which must have been formed in consequence of the blow. From the appearance of the wound . . . it might have been done by a heavy stick.

Additional testimony revealed that the victim was an unsavory character, earning the nickname "ruffian bear" because of his history of fighting. The official inquest interpreted the medical testimony to conclude that the victim "fell to the ground thereby then and there receiving a violent contusion on his right temple." There was no mention of the blow given by his adversary in the fight, and the verdict was accidental death.

Two other cases in which homicide was considered provide some insight into the application and quality of medical knowledge in cases of midwifery. The first, in 1865, involved a pregnant woman who was struck by one of her sisters. Dr. Oughtem arrived after the quarrel and noted,

> she had a contusion on the left side and was excited. It resembled as if she had knocked or fallen against something. It was not like a blow; she was a fat flabby person and not of a strong constitution. She complained of some flooding. . . The flooding was stopped and returned again the next day suddenly and on my arrival I found her pulse very low and the body very bloodless and she aborted on that night after which there was no further flooding. She gradually became more excited and restless and finally became perfectly insane. . . She sank through debility and insanity. I opened the body and found no symptoms to cause death. Corresponding to the external contusion was an internal congestion but not sufficient to account for death. The brain was a little soft. All other organs were normal.
>
> She died of puerperal insanity the result of nervous debility and loss of blood.
>
> The injury that caused the contusion on the side was the exciting cause of the abortion, the abortion caused the hemorrhage, and the hemorrhage the insanity. The mental excitement must have been a very active ingredient.
>
> Verdict: died from puerperal insanity caused by mental excitement and a blow.

It appears that the physician emphasized the "mental excitement" as an etiological factor to partially defray responsibility from the violence associated with the quarrel, and the jury accepted this. The second case, in 1835, involved expert medical testimony on midwifery. The female was an

unmarried nineteen year old who concealed her pregnancy. When labor commenced, Mr. Morgan, a surgeon, was summoned and arrived fifteen minutes after the birth.

> I explained that I had given up midwifery and had attended not knowing the nature of the case, and it was agreed another medical man should take my place. I tied the cord and made an examination of the after birth, and found there was no chance of its coming away.

Mr. Lock then attended her for three days and stated that,

> the parish surgeon had her under his care when I first saw her. The after birth I was told was still remaining. Portions by gentle force of my hand only came away. There was an hour-glass contraction in the womb and I considered that the larger part of the after birth was still remaining. . . Under the circumstances, I considered it not proper to use mechanical aid to extract the placenta. Mr. Morgan told me at the time that the after birth had not passed.

Testimony was then taken from Mr. Griffiths, Surgeon and Lecturer on Midwifery at the Westminster hospital.

> I found her at her mother's house. She was suffering from fever peculiar to women in child birth. She was at that time I believe in danger. I was informed by the mother that she had been delivered on Monday and that the after birth was still retained. I doubted what was said and endeavored to satisfy myself and came to the opinion that only a small portion was retained.
>
> It was evident from the nature of the symptoms that some foreign body was lodged in the womb and on Sunday morning a substance was expelled which upon examination proved to be a tumor and not a portion of the after birth. She gradually got worse. . . and then died.

Also involved in this case were accusations of malpractice. There was a note from the beadle stating that, "the mother reported in the neighborhood that Mr. Morgan's treatment had occasioned the young woman's death." This apparently elicited the inquest and the coroner wrote, "after due consideration an order for disinterring the body was issued together with the usual warrant for the inquisition." The body was disinterred and Mr. Griffiths performed the post-mortem examination.

> I opened and examined the body and found that there had not been retention of the after birth or any portion of it. The tumor I consider had existed for some weeks. I found the womb in a state of inflammation and the bowels implicated to a great degree. There was a large quantity of puriform fluid effused into the cavity of the abdomen, which was sufficient to account for her death. The average time of the passing of the after birth is about 20 minutes, but cases occur in which it is retained for a much longer period, and in which it becomes necessary to remove it by mechanical aid. I should be inclined to remove it in four hours if not expelled earlier unless symptoms indicate the propriety of its extraction earlier.
>
> I have no reason to suspect improper treatment previous to my attendance.
>
> Verdict: the said May Brinnen. . . departed this life in a natural way by the visitation of God and not from inattention, neglect or improper treatment of any of the medical men who attended her.

The woman apparently died from an extremely rare cause, possibly a choriocarcinoma following an otherwise normal pregnancy. The incidence of such is less than one in 15,000 births, and it occurs more frequently among older women who have had multiple gestations.[64]

The coroner's inquest and investigation was the key to uncovering cases of homicide being masqueraded as a natural death. Yet, it must be understood that the many failings already outlined were not entirely the fault of the coroner and the medical witnesses. Due to the mechanics of the system the coroner was only acquainted generally with those deaths obviously caused by violence, and was too seriously limited financially to routinely conduct a thorough inquest. The fact that no deaths other than those of obvious violence were uncovered leaves little question that numerous cases of homicide went undetected. Sensational, highly publicized murder cases with bodies disposed of illegally (trunks, secret burial, acid, etc.) were far less common and also less difficult to uncover than cases in which the perpetrator attempted to get the death certified, registered, and the body disposed of through normal channels as a natural death.[65]

> The number of cases in which the discovery that the body of a murdered person has been disposed of as a natural death has only been made as a result of investigations into a later and recognized murder, allow us to assume that many murderers must be entirely successful avoiding detection. The murder rate relates only to cases identified as homicide. . . and may therefore lull us into a false sense of security.[66]

Prior to the Birth and Death Registration Act of 1836 there was no formal check on the disposal of bodies. The first major reform of the coroner system, the Act of 1751,

provided fees to coroners for inquests "duly held" and an allowance for travel. The intent of the act was to encourage inquests into all cases of deaths from sudden or unknown causes, and not to limit inquests only to "persons slain." Previously, "persons slain" were his only reimbursed cases and, therefore, in practice the only cases generally investigated.[67] However, the justices, who held responsibility for allowing payments of coroners' fees, conspired to prevent payment and further attempted to limit notification of sudden deaths to the coroner. The justices, perhaps more than any other factor, were responsible for the slow development of the English medicolegal system over the century studied. They refused coroner payments for any inquests without clear cut evidence of felonious violence. The motivation behind the justices' interference and limitation of payments included a "misguided zeal for economy, but they also bitterly resented the coroner's power of committal on inquisitions which they regarded as an interference with their own courts."[68] Unfortunately, the High Court led by the esteemed jurist, Sir Mathew Hale, upheld the justices' right to limit payment and agreed with Lord Denman who wrote as late as 1842 that,

> the mere fact of a body lying dead does not give the coroner jurisdiction, nor even the circumstances that the death was sudden; there ought to be a reasonable suspicion that the party came to his death by violent or unnatural means.[69]

Thus, the intent of the Act of 1751 to investigate all sudden or unexplained deaths had been drastically eroded, and in the nineteenth century it was systematically destroyed. The Middlesex justices passed a resolution in 1851 that strongly limited the cases in which the coroner's expenses would be approved and stated that coroners should not be notified of sudden death except under certain circumstances. These resolutions were adopted with minor variations throughout England.[70]

Aside from the justices, the coroner system had serious other difficulties detecting potential homicide cases. The searchers were responsible for viewing the body and reporting the causes of death. Although by 1833 they had largely become obsolete,[71] they certainly played a major role in the reporting of deaths during the first half of this study. John Graunt described the searchers' functions.

> When anyone dies the searchers hereupon (who are ancient matrons, sworn to their office) repair to the place where the dead corps lies, and by view of the same, and by other enquiries, they examine by what disease or casualty the corps died. Hereupon they make their report to the parish clerk, and he, every Tuesday night, carries in an account of all burials and christnings happening that week, to the clerk of the hall. . .
>
> I say, it is enough, if we know from the searchers but the most predominant symptoms; as that one died of the head-ach, who was sorely tormented with it, though the physicians were of opinion, that the disease was in the stomach. . .
>
> To conclude, in many of these cases the searchers are able to report the opinion of the physician, who was with the patient, as

> they receive the same from the friends of the defunct; and in very many cases. . . their own senses are sufficient. . .[72]

However, this system functioned very poorly, and the searchers were often unreliable, uneducated, otherwise destitute women who viewed the bodies for a small fee paid by the parish. The Gentleman's Magazine in 1779 reported the following proceedings at an inquest where a searcher testified.

> Q: How did you examine this body?
> A: In the usual way; by looking at the face and feet.
> Q: What, did you not turn up the shroud, and examine the body all over?
> A: No, it is not customary, without we have suspicion.[73]

The searchers were also easily bribed to misrepresent the death.

> The two old women were usually pew openers and their fee was two shillings if they agreed not to exercise their right to view the body, as was generally the case. In addition, they expected to be supplied with liquor. Their certificate was accepted by the minister as authority for interment of the body, and by parish clerks as the basis for his returns on which the Bills of Mortality were dependent.[74]

It is important to re-emphasize that prior to the 1836 Births and Registration Act, there was no formal registration of deaths, and the only reports collected concerning deaths were the Bills of Mortality which were assembled from reports by these searchers.

The police also presented a problem for the coroner. In 1835, a directive was distributed to the metropolitan

police "ordering notification of the coroner of violent or sudden deaths, or casualties where a coroner's inquest should be held."[75] But, by 1860, partially because of the justices' interference, only one per cent of inquests held by the coroner of Middlesex were received from the police, and this was generally true throughout the various counties.[76] Bodies of drowned victims washed up on shore were usually buried without any inquest, and an Act of 1808 required only notification of the church warden and burying with "all possible speed" under penalty of fine (possibly because of the health hazard of the unburied corpse). No mention is made of notifying the coroner in this act.[77] This was a significant liability to the medicolegal system since drowning in several counties was a common problem. In Westminster, there were ninety inquests on bodies found drowned, many of which may have been suicides or even homicides, but the inquest generally concluded simply "found drowned, no evidence how." Forbes[78] noted in his Middlesex study that if no witnesses came forward, the inquest routinely registered the verdict as an accidental death.

Even after the 1836 Registration Act, the potential for escaping detection of homicide existed because the death could be registered and not certified by either a qualified medical practitioner or by the coroner after an inquest. Furthermore, the coroner could not authorize a post-mortem examination unless he held an inquest. Until

1926, the coroner had to rely on his instincts and the circumstances when he refused an inquest acting without the benefit of an autopsy. In 1858, the Registrar General reported that more than ten per cent of all deaths were still uncertified.[79]

The medical profession could also acquaint the coroner with any suspicious deaths. In the late 1800's, the coroner's society passed a resolution that, "in all cases of death from violence or unnatural causes, it is a common law duly imposed on the medical practitioner in attendance, amongst others, to report to the coroner."[80] However, this was generally ignored. An editorial in the British Medical Journal[81] stated,

> no coroner has yet been found rash enough to try the experiment of indicting anyone for not giving him information of a suspicious death. . . No medical practitioner need feel seriously disturbed by the announcement of this new addition to his multifarious activities.

Relations between the medical men and the generally non-medically qualified coroner were far from ideal.[82]

Despite these severe handicaps, progress was gradually made during the nineteenth century, and considerable effort was mounted to reform the system. First, the general community was becoming increasingly upset with the system. "In 1845 the Home Secretary told the House of Commons that one murderer had been able to dispose of more than twenty

victims in Norwolk without a single inquest having been held."[83] At the same time, newspapers were criticizing the interferences of the justices in the investigation of sudden deaths, and "one could scarcely take up a newspaper without seeing a case of suspected or proved murder by poisoning."[84] Criticism also mounted against the superficial inquests that routinely listed the cause of death as "natural" or "by visitation of God," and the general lack of medical evidence and post-mortem examinations. According to the Report of the Registrar General in 1841,

> Such verdicts as natural death or visitation of God, it is scarcely necessary to say, are not answers at all, but mere evasions of the inquiry.[85]

> The coroner of Whitby, offended both by the quotation from the Report and by the comments of his colleague, retorted that a coroner's jury was entirely free to give such opinion. According to The Lancet, the coroner of Whitby 'was happy to say that he had not yet outlived his belief in God, and hoped it would be long before an English jury could be found that had done so.'[86]

Two additional major reforms, alluded to earlier, must be reemphasized. In 1858, the Registrar General attacked the justices, criticizing the restrictions on notification of sudden deaths to the coroner which had allowed notorious multiple murders by poison. The Registrar General further denounced the terribly low mileage allowances and payment, and emphasized the need for medical examination. "Without an examination of the organs of the body, and often without

analysis of their contents the cause of death cannot be determined, either negatively or affirmatively."[87] Largely because of this criticism, legislation was passed in 1860 giving the coroner a salary to ensure his independence from the justices. The second advance was the Coroners' Act of 1887 which finally made statute the 1860 select committee recommendations.

> It is far better that inquests should occasionally be held unnecessarily than the chances of detecting great crimes should be diminished. . . An inquest should be held in every case of violent or unnatural death, and also that the inquest should be held in cases of sudden death, where the cause of death is unknown, and also where, though the death is apparently natural, reasonable suspicion of criminality exists.[88]

Certainly, one of the most important advances was the Birth and Deaths Registration Act of 1836 alluded to earlier, which led to the notification of the coroner in many more cases of sudden death, and more cases were recognized as violent.[89] Though registration was optional, this act established the framework for the 1874 act which made registration of deaths compulsory and required the certifying practitioners to be "registered" medical practitioners. However, even the 1874 act failed to ensure that local registrars reported all uncertified deaths to the coroner. Finally in 1926, legislation required all deaths to be certified by a physician as natural death, or be reported to the coroner to issue a burial order. The same year

legislation was also passed allowing for post-mortem examinations without an inquest.[90]

The cumulative legislation made essential progress that was necessary in order to guarantee the primary principle of any adequate medicolegal system; that is, to provide for a proper medicolegal investigation into all cases of sudden or unexplained death. This progress the justices and other factors had subverted for over a century.

SUICIDE

Suicide paradoxically was at the same time the gravest of sins and among the most excusable of crimes.

> A suicide is a person who has considered his own case and decided that he is worthless and who acts as his own judge, jury and executioner and he probably knows better than anyone else whether there is justice in the verdict.[91]

Technically, suicide was an act that had to both demonstrate suicidal intent and result in death.[92] However, for society, suicide represented a much more complicated action, fraught with shame, failure, sympathy, felony, financial loss, and everlasting condemnation. A brief history of suicide in England helps to understand these mixed attitudes which affected the coroner's jury.

In early medieval times, the Christian Church clearly manifested a hostile, stern attitude toward suicide and declared it tantamount to murder.[93] As early as the eighth century, it was recognized that suicide may be due to a mental disorder, and this was given a milder stigma.[94] In the middle ages, there existed two major theories defining the state of melancholy. The first ascribed the perplexing condition to supernatural agents; melancholy was a "vice leading to the sin of suicide, frequently at the prompting of the devil." The second theory, developing

around the thirteenth century, considered melancholy "a mental and emotional disorder due to a humoral excess and imbalance."[95] Bracton, the recognized legal authority of this period, exempted suicide by the insance from criminal charges. However, deliberate premeditated suicide resulted in forfeiture of the victim's goods, and suicide committed "to avoid a felony conviction" resulted in forfeiture of goods and land.[96]

The law furnished more brutal punishment for those who committed suicide without the exonerating claim of lunacy. "The body was dragged through the streets, head down on a hurdle, and then hanged on a gallows."[97] In addition, the body was buried at the crossroads of a highway at night with a stake driven through the victim's heart[98] (appendix). This latter ritual originated in pre-medieval times when belief in vampires and the protection offered by crossroads was widespread. The suicide victim was buried under the highway to prevent the dead spirit from haunting the living.[99] In addition, the body was buried under a crossroads because suicide victims were not allowed in consecrated ground, even though executed criminals had been buried in churchyards for centuries.[100] Suicide verdicts were rare and the vast majority of verdicts determined by coroner juries, including those in this study, were "lunatic suicide."

The violence committed against the victim's body ended in general by the end of the seventeenth century and was never mentioned in any inquests in this study. This reflected a developing leniency towards suicide. Burton, a minister, writing in Anatomy of Melancholy in 1621 stated that the prognosis for melancholy is poor and "after many tedious days at last, either by drowning, hanging or such fearful end, they precipitate, or make away with themselves."[101] John Sym, writing shortly thereafter (1637), wrote that those who committed suicide because of emotional or mental disturbances were not responsible and not subject to eternal damnation. He outlined diagnostic signs of impending suicide including:

> increased solitude, neglect of duties, change in behavior, ghastly looks, wild frights and flights, nestling and restless behavior, a mindlessness and close dumpishness, both in company and in good employments; a distracted countenance and carriage; speaking and talking to and with themselves, in their solitary places and dumps. . .[102]

He prescribed for these individuals an avoidance of "solitude, darkness, going over bridges or near the edge of steep places and weapons such as knives."[103]

The eighteenth century further weakened the traditionally harsh view taken towards suicide. Melancholy was even considered by many to be characteristic of the English people, known as spleen or the English malady. It was considered due

to both the physical and social environment.[104] Thus, England's break with some of Christian doctrine and a more secular approach, the belief that melancholy was inherent in English character, and the increasingly common feeling that suicide was often secondary to a mental or emotional disorder, were concepts all joining to reshape society's attitudes. Umfreville, who prepared the standard guide for the coroner in 1761, wrote,

> if an idiot therefore, or an infant under fourteen, or a lunatic during his lunacy, or if one distracted or losing his memory, thro' sickness, grief, infirmity or other accident, kills himself, it is not felony; nor can he be said to commit murder upon himself or any other; such a one therefore can incur no forfeiture.

Umfreville also recommended the wording observed in the Westminster inquests, "not being of sound mind, memory and understanding, but lunatic and distracted."[105] Thus, a lunatic suicide verdict diminished the stigma, removed the felony charge, and prevented confiscation of property by the Crown. More and more suicide cases were attributed to insanity. In this study, only three per cent of the suicides received suicide verdicts. Hair found all suicides, without exception, in the Shropshire coroner rolls between 1780 and 1809

> 'were described as not being of sound mind and understanding, but lunatic and distracted,' presumably a humanitarian formula designed to avoid the infliction of all the legal and social penalties, and therefore no indication of the real motives for suicide.[106]

In 1823 a law was passed preventing the burial of suicide victims under a public highway or with a stake through the body. However, burial was still required to be between nine in the evening and midnight.[107]

In the eighteenth and nineteenth centuries, more interest developed in suicide as a medical problem and the value of statistics as an important research tool in the study of suicide. A medicolegal distinction between insanity and emotional upset was expressed by Battie in his Treatise on Madness.

> Whatever may be the cause of anxiety, it chiefly discovers itself by that agonizing impatience observable in some men of black November days, of easterly winds, of heat, cold, damps, etc. And of the same nature are the perpetual tempests of love, hatred, and other turbulent passions provoked by nothing or at most by very trifles. In which state of habitual diseases many drag on their wretched lives; whilst others, unequal to evils of which they see no remedy but death, rashly resolve to end them at any rate. Which very frequent cases of suicide though generally ascribed to lunacy by the verdict of a good-natured jury, are no more entitled to the benefit of passing for pardonable acts of madness than he who deliberately has killed the man he hated deserves to be acquitted as not knowing what he did.[108]

Although anxiety and other fleeting emotions were recognized by the eighteenth and nineteenth centuries as distinct from mental illness, juries, as in this study, frequently accepted the least evidence of strange behavior or tension to render a verdict of lunatic suicide.

Regarding statistics, several authors argued suicide was difficult to evaluate because it was underreported. Relatives, to avoid disgrace, attempted to attribute the death to other causes.[109] Almost certainly, some of the bodies in the present study reported as "found drowned" were either suicides or homicides.

> Suicides particularly of the elderly and sick, who today make up a large part of those committing suicide, are sometimes passed off as natural death, and in earlier centuries, when the inspection of every corpse by a medical man was neither obligatory nor practicable, it would seem likely this was done fairly frequently.[110]

Casper, a Prussian physician, who was one of the first to research suicide statistics, emphasized the necessity of also trying to obtain statistics on attempted suicides.[111]

All the criticisms of the medicolegal system portrayed in the chapter on homicides are also applicable to deaths from suicide. Evidence of this is demonstrated in the suicide cases cited later in this chapter, and by the infrequency of post-mortem examinations. There were no autopsies in the 1761-1765 or 1800-1803 periods studied, although there were 165 suicides. In the 1835-1838 and 1865-1866 periods, autopsies were performed in less than 15 per cent of suicides. An example portraying the state of the art is cited by Havard[112] in an 1850 case in which a suicide verdict of "cut throat" was reached without medical evidence. Subsequent exhumation and autopsy demonstrated a fractured

temple due to a blow, and the cut in the throat penetrated to the cervical vertebrae. Lord Coleridge stated that if the coroner had not "been much wanting in his duty a verdict of murder would certainly have been given." The coroner responded that had he summoned medical witnesses, the cost almost certainly would have been refused by the justices. Forensic medicine was off to a shaky start in the nineteenth century.

The results of suicidal deaths in this study are summarized in the chart below. There were approximately three times more male than female suicide verdicts, 295 to 108. Hanging was the most common means, accounting for a third of both males and females.[113] Cutting the throat or self-inflicted stab wounds were the second most common means employed in males, twenty-five per cent, while fourth for females, thirteen per cent. Poisoning was the second most common means employed by females, twenty-four per cent, while fourth for males, nine per cent. The most interesting difference, however, was in shooting deaths, third most frequent for males, eighteen per cent, but only one female shot herself, less than one per cent.[114]

As was mentioned, the distinction between the two different verdicts, suicide and lunatic suicide, suicide due to insanity, made a very significant difference for both the legal and social penalties were far more severe for a verdict of suicide. Because of the sympathy of the jury,

SUICIDE

	Sex	No	S	LS	Hung	CT	Pois.	Drn.	Shot	Jump	Misc.
1761-5	M	45	3	42	28	4	1	4	7	1	0
	F	27	1	26	10	7	2	3	1	2	0
1800-3	M	65	3	62	18	17	4	5	19	2	0
	F	28	1	27	9	2	6	10	0	1	0
1835-8	M	127	2	125	34	39	18	12	16	7	0
	F	38	0	38	12	4	14	3	0	2	3
1865-6	M	58	2	56	18	15	5	4	10	1	5
	F	15	1	14	6	1	4	5	0	1	0
Totals	M	295	10	285	98	75	28	25	52	11	6
	F	108	3	105	37	14	26	21	1	6	3

Male - male; F - female; No - number of cases; S - suicide; LS - lunatic suicide; CT - cut throat and self-stabbing; Pois. - poison; Drn - drown; Misc.- miscellaneous.

nearly all cases here were listed as lunatic suicide rather than suicide.[115] Of all cases, only ten males and three females received a verdict of suicide, which is approximately three per cent of each. It is generally unclear what feature singled out individuals with suicide verdicts from the majority given the verdict lunatic suicide. Two of the cases involved prisoners and perhaps the jury was less sympathetic with prisoners.

Of the remaining suicide verdicts a few suggest the reason for the dreaded suicide verdict which is almost vindictive. In 1800, a twenty-nine year old man cut his throat. The house surgeon who cared for him at the hospital stated that he

> expressed hope and expectation to die. People saw him cut his throat and tried to stop him. It took him five minutes to do it and after he cut it he ripped it open with his two hands stating, 'I am a dead man.'

He was an Irishman, reportedly treated his wife badly, and had violently assaulted her. Perhaps the flaunting drama of his suicide, the treatment of his wife, and the fact that he was an Irishman all combined to convict him as a felo de se. An 1835 case of a waiter who shot himself contained the only autopsy among the thirteen suicide verdicts. According to the Charing Cross Hospital house surgeon,

> I found him with a wound on the right side of the body and discolored with gunpowder. . . there was a little tumor on the opposite side of his chest which was found to contain a ball. I found the ball had perforated his chest,

> passed through the diaphragm into the abdomen passed through the liver from above downwards and through both sides of the stomach in the same direction leaving the abdomen on the opposite side.

There was nothing to suggest why this verdict was not termed lunatic suicide, which was the usual result in unremarkable suicides or why this was the single suicide case with a post-mortem examination.

The number of post-mortem examinations for both suicide and lunatic suicide verdicts was disappointingly low. Even medical testimony was infrequent. However, when medical testimony was available and supported lunacy, the verdict, lunatic suicide was invariably obtained. In one case in 1835, a man cut his abdomen and throat with a razor. The wound in his throat "merely separated the integuments." There were five incisions in his liver and the omentum was injured as well.

> I think that in a healthy man such injuries might not occasion death. He had evidently injured his constitution by drink. . . The brain was in a state of chronic inflammation. Verdict: lunatic suicide.

Another 1835 suicide case involved a female who cut her throat, but medical test raised the question as to the true cause of death. There was

> much fluid in the chest which prevented her breathing. . . but the said inflammation might have ensued from other causes besides irritation from the wound extending down which is probable.

The working of the official inquest in this case varied from the usual set form. A suicide verdict generally stated that the victim

> not having the fear of God before his eyes but moved and seduced by the instigation of the devil. . . in the peace of God and of our said Lord the King then and their being feloniously willfully and of malice aforethought . . . did die.

In addition, "felo de se" (felony of self) was written on the back of the inquest. For a lunatic suicide, the inquest stated that the victim was "not being of sound mind, memory and understanding, but lunatic and distracted." However, in this 1835 case, the official inquest was unique and explained that the victim was "in a state of slight insanity."

Two cases of suicide from gunshot wounds contained autopsies, though they were markedly limited. The autopsy in an 1835 case consisted of an examination of the brain only. "The brain was greatly injured and the shot found in it." In another gunshot case in 1865, the testimony only mentioned that "the victim had a scalp wound and his hair smelled of powder. A bullet was found in his brain and it was consistent with the deceased having inflicted it himself." Although the cause of death seems obvious, these post-mortem examinations fall far short of the detailed procedure outlined by Guy below in cases of suicide gunshot wounds.

Gun-shot wounds caused by discharges close to the person are 'burnt by the flame,' and they may contain particles of unconsumed powder.

The bullet may prove to have been cast in a mould, or the wadding to be formed by printed paper or other material, in the possession of the person who fired the shot. It may even happen that the composition of the bullet, or the mode of making it, is peculiar. In medico-legal cases, therefore, the contents of a gun-shot wound should be carefully examined and preserved.

When the bullet takes a direct course through the body (that is to say, when it is not deflected) the character of the two apertures, coupled with the direction of the line which joins them, may serve to indicate the position of the body at the time the wound was received.

The question whether the wound was the result of accident, suicide, or homicide may also be raised respecting these in common with other wounds.

Suicidal wounds have the character which accidental wounds often, and homicidal wounds sometimes, lack, of being inflicted in front on the head or region of the heart. To this rule, however, some suicidal gun-shot wounds form an exception, inasmuch as the weapon is directed to the back of the head. As a general rule, too, the suicide fires only one shot; but suicides have been known to fire two pistols, and even to resort to fire-arms after the failure of incised wounds. In some cases the suicide is found in a room secured from within, with the weapon still grasped in the hand, and, when the priming was of powder, with the hand stained by it.

Some advantage is occasionally derived from an examination of the gun or pistol. When the combustion of the powder is imperfect, the finger introduced into the barrel

> is blackened by the unconsumed charcoal; and the residue is found to consist of this unconsumed charcoal mixed with sulphide of potassium.[116]

Very few of these details verifying suicide are apparent in the testimony of these inquests.

Pregnancy was often considered as a possible motivation in the suicide of a single female. Two autopsies, one in 1835 and one in 1836, addressed this question. The first was a servant girl who ingested poison.

> It was found that she died from inflammation and slight ulceration of her stomach from the poison. What came from the stomach was examined and found to be arsenic. It is doubtful that she was pregnant.

The second case involved a servant girl who "drowned herself while insane." The doctor's deposition noted there was "no evidence of pregnancy."

Though no poison cases were alleged to be homicides, poisoning was a frequent cause of death in verdicts of suicides, and toxicology became a major aspect of forensic medical knowledge and investigation. The first analysis of poison in this study was performed in a case of arsenic poisoning in 1835. It also contained the first mention of a stomach pump. The physician, hearing the man had ingested poison, administered

> a stomach pump, put him to bed, and applied the proper remedies. The examination after death showed the stomach to be very inflammed and minute portions of arsenic were found adhering to the larger curvature and one mass

> at the pyloric end so imbedded that it had not come away. This mass was subjected to the M tests and found to be arsenious acid.

Christison said of arsenic,

> On account of the shameful facility with which it may be procurred in this country, even by the lowest of the vulgar, and the ease with which it may be secretly administered, it is the poison most frequently chosen for the purpose of committing both suicide and murder. . . It is fortunate that there are few substances in nature, and perhaps hardly any other poison, whose presence can be detected in such minute quantities and with so great certainty.[117]

The M tests probably refer to the Process of Marsh, a series of experiments using sulfuric acid designed to test for arsenic when it is mixed with food and organic mixtures.[118]

Three autopsies, all in the final period (1865-1866), contained isolated comments indicating that examination of the brain might yield evidence of an organic cause of the mental disturbances. In a male who shot himself, the examination showed "the brain perfectly soft from the excess of drinking and looking at the state of the brain I should say a person was not of sound mind." In another case, originally without an autopsy, the inquest was adjourned for one week in order to have Dr. Thomas Leigh perform an examination of the victim's head. Dr. Leigh also requested permission from the coroner to move the body to a "dead house" to perform the examination under better conditions. The examination of the brain was unremarkable. In the third case, the autopsy stated simply, "the brain, quite healthy."

This medical man had also requested "authority to remove the body to the dead house so he could do the requested examination of the brain." This post-mortem examined the head only, which was not uncommon in suicides, but was unique in that it was the only even partial post-mortem done on a suicide who had died by hanging. Yet, hanging was the most common form of committing suicide. The contemporary ideal investigation for the question of a suicide by hanging can again be obtained from Guy.

> Death by hanging takes place, then in different ways and at different intervals of time. The more speedy deaths may be due to injury of the spinal marrow above the origin of the centers of the respiration, and, more rarely, to syncope from fright. But in point of rapidity will be death from apnea and the least rapid that by apoplexy.
>
> We are not without information as to the sensations that accompany death by hanging. Suicides saved from death, and philosophers who have instituted experiments on themselves, have both contributed something to our knowledge. It appears that the sensations are not always the same; and the difference probably depends on the various degrees in which the windpipe and blood vessels are compressed. Some have retained no recollection of what happened to them; others were conscious of evident loss of sense and motion. In others a deep sleep was ushered in by flashes of light, by a bluish flame, by brilliant circles of colors, or by more definite ocular illusions, accompanied by hissing or singing in the ears. In other instances, the sensations are stated to have been extremely pleasurable, though of short duration. These sensations resemble those that occur in cases of disordered cerebral circulation, and those that usher in the fits in some cases of epilepsy.

But it is only in cases of suicide that these pleasurable sensations manifest themselves. In homicidal cases, when much violence is used, the countenance expresses suffering; the eyes are brilliant and staring, and seem to be bursting from their sockets and the eyelids open and injected; the tongue, swollen and livid is forced against the teeth, or more or less protruded from the mouth, and compressed or torn by the contracted jaws; the lips are swollen and the mouth distorted; and blood, or a bloody froth, hangs about the mouth and nostrils; the upper extremities are still, the hands livid, and the fingers so forcibly closed on the palm as to force the nails into the flesh; and the convulsions are so violent as even to cause the expulsion of the contents of the bowels, and to produce erection of the penis, with expulsion of the urine, semen, or prostatic fluid. The circumscribed violet discolorations on the trunk and extremities common to all cases of death by apnea are strongly developed.

1. Did the suspension take place during life, or after death: The points most worthy of attention as bearing on the solution of this question are: The mark of the cord; The appearance of the countenance; The position and state of the tongue; The condition of the genital organs; and The expulsion of the feces.

The figures of the Registrar-General show that the probability is always strongly in favour of suicide; and, for obvious reasons, hanging is a mode of death which a murderer is little likely to resort to. It presupposes a great disproportion of strength between the murderer and his victim, or a combination of two or more persons against one. The solitary ascertained case of homicide in the five years 1852-1856, was committed on a young child.

If a man were found suspended at a height from the ground which he could not by any possibility have reached, and with no object near on which he could have mounted, we must conclude that he was suspended by another.

> The marks of violent struggles on the clothes or person of the deceased, or of severe injuries, would justify a suspicion of homicide; but as severe and extensive injuries have been known to be produced by a suicide, and slighter injuries may take place accidentally, this criterion must be used with caution.
>
> It may be well to add that persons found suspended have been previously killed by strangulation or by other violence, or by poison.[119]

Clearly this kind of investigation was not applied to any of the cases in this study.

There were a few cases in which non-suicide verdicts were recorded after the verdict of suicide had been entertained. Medical evidence was essential. In an 1865 case,[120] a fourteen year old female with a three month history of diarrhea and weight loss, the jury rendered a verdict of natural death after Dr. Barclay performed an autopsy.

> I found the stomach and bowels all of them in a state of patchy congestion with curious blackish looking deposits adhering to the coats and we could trace no cause for this. The condition of the stomach and intestines and the absence of any other cause of death leads to the inference that the deceased died from poison. Brain and other organs all healthy. I should think it was from antimony or arsenic.
>
> The result of the post-mortem does not satisfactorily account for the cause of death. The stomach and intestine presenting some appearance of having been poisoned. These have been carefully secured and are now in my charge, as is also the body of the deceased, waiting instruction.

The stomach and intestines were sent for analysis to the famous Dr. Alfred S. Taylor, author of Principles and

Practice of Medical Jurisprudence. (Taylor's formal analysis sent to the coroner appears in the appendix.) Taylor also wrote a note to the coroner:

> Regarding Jane Clark, deceased, you will perceive by the report herewith that the viscera of the deceased did not contain a trace of arsenic or antimony. The absence from the stomach and intestines proves that there was no recent taking of the poison, and its absence from the liver and kidneys proves that there was no remote (prior) administration.
>
> Still the appearance observed by Dr. Barclay were quite sufficient to justify this chemical investigation, and had I seen them as he described them in his deposition, I should not have given an opinion of the cause of death until after our analysis had been made.
>
> I do not think therefore you will have any further trouble in the case. . . An eminent Dutch professor of medical jurisprudence and toxicology, Professor Rieuderhoff was in London, and came over to my laboratory to watch the processes of analysis in this case and he was satisfied as well as myself that there was no arsenic or antimony.
>
> Although you lost no time in sending the viscera and I lost no time in examining them with Professor Rieuderhoff, we could make nothing of the appearances. The stomach and intestines were a black mass of putrefaction.

The wide variability of medicolegal investigations is well demonstrated by this case; the inquests varied from no autopsy to cases similar to this with analyses by men preeminent in the field of forensic medicine.

The question of poisoning was raised again in a case in 1836, and a commendable investigation ensued. The

alcoholic wife of a fifty-six year old man claimed her husband had been poisoned. The inquest was adjourned in order to have a post-mortem performed.

> There was no distortion of countenance to indicate having had a fit, neither was there any lividness to indicate that he died of suffocation or any obstruction of the lungs. There were no external marks of violence. The brain was perfectly healthy and the stomach presented no appearances of recent inflammation but was in that state that is invariably met with in persons addicted to spirit drinking. The contents were carefully obtained and have been analyzed both by myself and an analyzing chemist (Mr. Leithead). They afforded no indication of the presence of mineral or other poisonous substance.
>
> The bowels were in a healthy state. The right lung was healthy, the left much diseased in a state we style dropsy of the lung. The heart was very much enlarged. The valves were ossified and the aorta was partially ossified. There was a considerable effusion of serum in the bag of the heart. The immediate cause of death, in my opinion, was a sudden interruption of the heart's action in consequence of excitement and the bony state of the valves of the heart not allowing the blood to pass fully. In consequences of the agitation, the circulation stopped and he died.

The investigation removed any doubt of poisoning and clearly described a natural death due to congestive heart failure. The most thorough investigations in this suicide study involved poisons. This is not so surprising, because, as mentioned, toxicology was one of the leading fronts of forensic medicine.

In two other cases of possible suicide in 1836, medical testimony could not determine the cause of death, despite generally adequate contemporary examinations of the circumstances. One case involved a fifteen-year-old male who "swallowed the poisonous cantharides, Spanish fly, under unclear circumstances." The autopsy revealed

> very minute particles with the appearance of cantharides in the esophagus and stomach. There were marks of inflammation of the stomach. Also there was inflammation of the kidneys, especially the right and of the bladder. There was a aneurismal tumor at the base of the brain which had considerably compressed a very important part of his organ and that part of his organ was softened. There was a large aneuryism of his right carotid artery and scrofulous disease of a large number of mesenteric glands. There was enlargement of the right ventrical of the brain filled with serum.
>
> The boy would not have died if he had not taken the poison. The poison alone would not have killed him except for the tumor already present.

Cantharides are a preparation of dried Spanish flies that was used internally as a diuretic or used externally as a powerful skin irritant. However, it was often used for non-medical purposes.

> Sometimes it has been swallowed for the purpose of self-destruction, sometimes for procuring miscarriage. But most frequently, on account of a prevalent notion that it possesses aphrodisiac properties, it has been both voluntarily swallowed, and secretly administered to excite the venereal appetite. That it has this effect in many instances cannot be doubted. But the old stories which have been the cause of its being so frequently used for

> the purpose, are many of them fabulous, and all exaggerated. Often no venereal appetite is excited, sometimes even no affection of the urinary or genital organs at all; and the kidney and bladder may be powerfully affected without the genital organs participating. It is established, too, by frequent observations, that the excitement of the genital organs can never be induced, without other violent constitutional symptoms being brought on, to the great hazard of life. . . . No antidote has yet been discovered.[121]

The death of the fifteen-year-old boy was not likely to have been a suicide. The caution on the part of the medical man to definitely assign a single cause of death in the presence of significant other disease was probably appropriate. The second case involved a seventy-three-year old man who cut his throat. The post-mortem examination found some

> disease of the brain and some disease of the heart. These of themselves I consider were not sufficient to cause death. Nor do I think the wound itself would produce death. But that joined with these diseases and the depressed state of spirits he suffered under were the cause of death. The wound was I think between two and three inches thick and I estimated in depth so as to just touch the windpipe.

Regardless of the accuracy, the medical testimony in these last few cases provide the realization that the actual cause of death might differ from the most obvious external evidence. It represents an important step forward in the application of forensic medicine principles. The efforts to use all the techniques and science available is commendable even if applied only sporadically.

INFANTICIDE

Infanticide, felonious homicide against children less than one year of age,[122] was viewed differently than adult homicide in England during the period of this study. The approach a society takes towards investigations of death to a degree reflects the value placed on human life; and similarly, how a society investigates infant deaths reflects its attitudes toward children. England historically, as did many other societies, gave infants lesser status and it is important, therefore, to view infanticide historically.

Among non-Christian societies, except Jews, infanticide has generally been, if not an advocated, then certainly a tolerated means of eliminating both additional members who increase demand on the limited food resources as well as the sickly, deformed, and illegitimate infants. Langer describes Eskimo and Arctic Canadian communities whose elders even today put babies out to freeze when food supplies are low.[123] In ancient Greece, Aristotle wrote that the country

> lived always under the shadow of fear of too many mouths to feed (and many infants were) a never failing cause of poverty among the citizens, and poverty was the parent of revolution.[124]

Females were eliminated more often than males and rarely did parents raise more than one female, leading to many more

adult males than females.[125] The prevalence of infanticide constituted "one of the deepest stains of the ancient /Roman/ civilization and . . . a crying vice of the empire."[126] With the influence of Christianity, acceptance of wholesale infanticide began to change; all human life was held inviolable, and in the fourth century, infanticide in Rome was made a crime punishable by death.[127]

Yet, clearly infanticide continued to be practiced throughout the centuries in Europe, and in England specifically. Until approximately the sixteenth century, dealing with infanticide was left primarily to the Church. Physical violence was probably uncommon and most infanticide involved suffocation which could be masqueraded as "overlaying," accidental suffocation of an infant by another person in the bed.

> The large number of references to /overlaying/ in penitentials and other Church documents underlies the fact that it must have been a persistent and quite common problem.[128]

It was, of course, nearly impossible to prove criminal intent. Moreover, most cases probably went unnoticed, for the victim could easily be hidden in the rural England of the middle ages.[129]

Around the year 600, penance for overlaying was set at one year on bread and water and two more years without flesh or wine, and the sentence could be reduced if the mother were a serf or very poor.[130] At the same time, accidental killing of an adult drew five years' punishment.[131] In the

thirteenth century, church legislation continued trying to control overlaying.

> Under threat of excommunication from the Church, women should be restrained from keeping their children close by in bed lest they smother them while in sleep. Likewise, it is to be known that no women lay down with their child in bed with her unless it is or is about three years of age.[132]

Though the punishment for overlaying even when discovered seems minor, "it was merely a recognition by the Church of a method of population control by the poor that may have been necessary, in many cases, for survival."[133] It is also worth noting that essentially all prosecutions throughout the centuries involved the mother, when the perpetrator was recognized, and this certainly was true in this Westminster study.[134]

In the later middle ages, penalties for overlaying became more severe and in 1237 it was elevated from a venial to a major sin.[135] Priests had wide discretion in determining appropriate punishment. The church court required compurgators (witnesses), people who would swear that they believed the accused. If the necessary number of compurgators were brought forward, the charge would be dropped. Thus, despite the legal equating of infanticide with homicide, the society accepted the phenomenon as one that took place frequently in the family, and was dictated by pressures for survival.[136] The poor drew particular compassion; they were

> at the mercy of the chronic cycles of famine, malnutrition, disease and death, and their children were by far the most common victim of parental negligence and despair, of the abandonment, exposure, and even infanticide, which must be counted among major threats to young life. . . in a time when the means of limiting birth were. . . virtually non-existent.[137]

Furthermore, the governmental lack of involvement further demonstrated the absence of any outrage expressed by society against infanticide. The first traces of government involvement began in the twelfth century when the Crown would investigate infanticide only if the perpetrator were not one of the parents.[138] More insight is provided by the definition of a freeman in effect during the middle ages, which partially explains the vulnerability to infanticide of illegitimate infants and those grossly deformed.

> Among freemen there may not be reckoned those who are born of unlawful intercourse, such as adultery and the like (by-blow, spurious, bastard) and other begotten of unlawful intercourse, nor those who are procreated perversedly, against the way of human kind, as for example, if a woman bring forth a monster of a prodigy.[139]

By the end of the middle ages, the Crown had taken from the Church all control over infanticides. However, the government was not any more successful controlling the incidence of overlaying.[140] Infanticide in the late sixteenth century was tragically common, and many surely were concealed from the coroner. Illegitimate infants suffered most and of

thirty cases in one study, all but three victims were illegitimate.[141]

However, changes were beginning that would have an effect. The rapid urbanization made disposing of dead infants in secrecy more difficult, and simultaneously, society's outrage toward the current treatment of children was escalating.[142] Because of the prevalence of infanticide among the illegitimate children, the Act of 1623 was passed to prevent their murder.

> Whereas many lewd women that have been delivered of bastard children, to avoid their shame and to escape punishment, do secretly bury, or conceal the death of their children, and after, if the child be found dead the said woman do allege that the said children were born dead; whereas it falleth out sometimes (although hardly it is to be proved) that the said child or children were murdered by the said women their lewd mothers, or by their assent or procurement; for the preventing therefore of this great mischief, be it enacted by the authority of this present Parliament, that if any woman after one month next ensuing the ends of this session of Parliament, be delivered of any issue of the body, male or female, which being born alive, should by the laws of this realm be a bastard, and that she endeavor privately either by drowning or secret burying thereof, or any other way, either by herself or the procuring of others, so to conceal the death thereof, as that it may not come to light, whether it be born alive or not, but be concealed, in every such case the mother so offending shall suffer death as in the case of murder except such mother can make proof by one witness at the least, that the child (whose death was by her so intended to be concealed) was born dead.[143]

The Act equated the killing of an illegitimate infant with adult murder, thus giving more protection to the vulnerable illegitimate. More significantly, however, it reversed the common law presumption of innocence. Under the 1623 Act, any illegitimate infant that was concealed was presumed born alive unless the single female proved otherwise. This meant the child was presumed murdered if concealed, and not proved stillborn, thereby demanding the death penalty.

Still, there remained a distinction between the attitude toward the illegitimate and legitimate child. The presumption, generally, was that the married female had no motive for infanticide, and therefore must have been temporarily insane. However, the jury was increasingly reluctant to convict any woman and elicit the death penalty for murder; "they would grasp at any suggestion that the baby had been stillborn, as had died in the course of birth or had been accidentally killed."[144]

> There are no criminals who meet with so much sympathy as women guilty of infanticide. This feeling, largely shared by members both of the medical and legal profession, is partly explained by the exceptional nature of the crime, and partly perhaps by the extreme harshness and cruelty of a former statute (the Act of 1623), which virtually visited the concealment of shame with the punishment of murder.[145]

Juries as noted, generally had great difficulty proving cause of death, and the hydrostatic lung test, the accepted

standard for judging if an infant had respired (a full discussion follows later) was already being called into question by Morgagni and William Hunter as early as the mid-eighteenth century.[146]

The 1623 act placed a tremendous burden on the jury by presuming murder in the case of concealment. William Hunter was one of the leaders in crying out against the law. He claimed women should be given the "greatest compassion, and that in general the father of the child is really the criminal, often cruelly so; the mother is weak, credulous, and deluded."[147] The woman is often so taken with shame as to commit suicide. In cases of infanticide, Hunter argues that innocence need not depend on full claims of insanity, but that most cases are not due to "phrenzy" (insanity) but an "unconquerable sense of shame," and that the female would prefer suicide except that would result in an inquiry and further expose their shame.

> If the single woman is delivered of a dead child, and if the law punished such a woman with death for not publishing her shame, does it not require more from human nature than a weak human can bear? In a case so circumstanced, surely the only crime is the having been pregnant, which the law does not mean to punish with death; and the attempt to conceal it by fair means should not be punishable by death, as that attempt arises from principles of virtuous shame.[148]

By the eighteenth century, there had developed a marked increase in illegitimacy secondary to the exploitation of the single women of the lower class, and studies

continued to show that the vast majority of cases of infanticide involved single women.[149] The secretary of the society for the rescue of young women and children testified that "nine out of ten girls in trouble are domestic servants: in many instances the fathers of their children are their masters, or their masters' sons, relatives, or visitors."[150] Once pregnant, the female was on her own, and professional midwives for a pittance would perform abortions, deliver the child, or "nurse the child" after birth, which meant killing the infant, usually with opiates or starvation.[151] Other infants were simply left in the street, privy, river, or on doorsteps.

Opiates were a major source of poisoning, both intentionally and accidentally. Infants were routinely administered "Godfrey's mixture" as early as three to four weeks old and graduated to Laudanum which in some areas was given to nine out of ten families to keep the children quiet. Arsenic was another poison employed for murdering children.[152] Besides overlaying, or infanticides, suffocation also occurred when infants were left in a vertically folding bed which "accidentally" folded up. Forbes speculates other infants "found dead of suffocation" might have been victims of what we now called sudden infant death syndrome.

People were "so depressed by the daily sight of infant corpses thrown on the dust heaps of London" that a foundling hospital was opened in 1741.[153] The demand on the foundling

hospital was exorbitant, and women fought outside the gates to get in. In 1756, Parliament increased funds but the hospital was opened to all, not just Londoners, and babies were left without the mother being seen or questioned. The open admission policy overwhelmed the hospital. There were insufficient wet nurses and "instead of being a protection to the living, the institution became as it were a charnel-house of the dead."[154] Thus, in 1760, Parliament was forced to repeal the open admission policy.

Because of the injustice of the 1623 act, it was repealed in 1803, which reinstated the common law presumption of stillbirth for illegitimate newborns found dead. The law now also stated that infanticide was equivalent to murder, except that if acquitted, the accused could receive a two-year separate prison term for concealment. In 1828 the law was extended to include legitimate as well as illegitimate births; and for conviction on charges of concealment, it was not necessary to prove the infant died after birth. By reinstating the presumption of dead birth, an infanticide verdict now required proof of murder, an almost impossible task, and this meant infanticide could be committed with near impunity. Infanticide flourished.

> Dr. Lankester, one of the coroners for Middlesex, charged that even the police seemed to think no more of finding a dead child than of finding a dead dog or cat. There were, he asserted, hundreds, nay thousands of women living in London

> who were guilty of having at one time or another destroyed their offspring, without having been discovered.[155]

Part of the problem was that because the infant death rate from natural causes was so astounding, many deaths indeed were not due to criminal acts, and therefore death was assumed natural. In the late eighteenth century, half the children died before three years of age.[156] Furthermore, juries continued refusing to treat infanticide as murder and in 1864 the Home Office advised prosecutors "to advise the commutation of the death penalty when a woman was convicted of murdering her own child" if the child was less than twelve months old.[157]

Most infanticide probably occurred in so-called "baby farms." Women working the fields or factories were forced to leave their children with nurses known as "killer nurses" or "angel makers," who constituted the "baby farms," where generous doses of laudanum were administered to eliminate any unwanted child. Regulations of arsenic were made in 1850, but the sale of children's preparations of opiates was astronomical. In one town of approximately 6000 "one chemist alone sold twenty five and a half gallons of Godfrey's per week."[158] Another horror was the practice of enrolling the child in burial clubs (insurance) prior to killing them. Instances of enrolling a child in more than ten clubs and collecting from all were reported.[159] The clubs were extremely popular. In one town, more than 30,000

people were enrolled, and in some towns enrollment surpassed the total population. As in ancient times, females, who were less useful to their parents, comprised a higher incidence of infanticide victims.[160] Dr. William Ryan wrote in 1862,

> we cannot ignore the fact that the crime of infanticide. . . is widespread and on the increase. . . It is unhappily true that infanticide is not held up in the same light as other murders by the public generally. . . There is no crime that meets as much sympathy, often of the most ill-judged kind.[161]

In addition, the already outlined problems faced by the coroner system in investigating suspected homicide were just as relevant to infanticide. When the Middlesex coroner was asked by the Select Committee on Coroners, "Suppose a child is found dead, do the police report it to the coroner" he replied, "No, seldom ever." And when asked, "Why do you not take inquests on cases of overlaid children?," he replied, "Because no notice is sent to me, the police dispose of them."[162]

Not until 1926 did every death require certification by either a doctor or the coroner. The ability to register deaths without certification until the twentieth century allowed Mary Cotten in only a few years to poison her mother, three husbands, fifteen children and a lodger before suspicion was aroused.[163] In 1850 it was reported that

> in England there are, annually, not less than 40,000 children who are stated to be still-born, and of the fact and cause of whose death no certificate whatever is required. An investigation is never, or but rarely, made as to the circumstances; neither is the burial ever

> registered. Great facilities are thus afforded for the concealment of birth, and also for the commission of the crime of infanticide. Children, who have been born alive, are frequently interred as stillborn, in order to avoid the burial fees, while stillborn children are frequently represented to have been born alive, in order to obtain money from burial clubs.[164]

In Manchester, forty-five per cent of stillbirths were interred without testimony supporting stillbirth or cause of death.[165] The second half of the nineteenth century, however, saw the beginnings of reform. The press became a powerful voice for reform.

> The Standard in 1862 denounced 'this execrable system of wholesale murder' while the Morning Star in 1863 asserted that 'this crime is positively becoming a national institution,' /and a member of Parliament declared that the country held/ a carnival of infant slaughter. . . every year a massacre of the innocents.[166]

In 1872 the first Infant Life Protection Act was enacted requiring registration of all houses with more than one child under twelve months of age. This would thus register all "baby farms." All deaths including stillbirths were to be reported.

As Hunter had long before advocated, the court began to consider the mental status of the accused. Rather than adhere to the stricter rules of legal insanity for homicide, a 1922 bill outlined an extraordinarily liberal definition of excusable mental status in cases of infanticide:

> Where a woman unlawfully by any direct means intentionally causes the death of her newly born child, but at the time. . . had not fully

> recovered from the effect of giving birth to such a child, and by reason thereof the balance of her mind was disturbed. . . [she shall not be held responsible].[167]

The phrase "the balance of her mind was disturbed" was interpreted by juries as emotional upset rather than insanity. Furthermore, the law allowed juries the flexibility to deliver a verdict of manslaughter as an alternative to murder, and judges were given the flexibility to render a sentence ranging from life imprisonment to a fine or conditional discharge.[168] Thus the law created a more sophisticated system with a wider range of penalty than simply execution or innocence in which the defendant was routinely released.

These regulations, growing public interest in maternity and child care, progress in pediatrics and subsequent advances in contraception, all led to a decrease in infanticide and the infant mortality rate. This does not mean, however, that newborn lives even presently hold value equivalent to adults. The chart (appendix) demonstrates that from 1923 to 1965, of those convicted of infanticide, the per cent going to jail has plummeted (49% to 1%) and the number released completely or on probation has increased (47% to 73%). Thus, the lower status afforded the infant "has been institutionalized in English law on infanticide which prescribes lesser penalties than those for adult homicide as well as establish a very liberal insanity defense."[169]

The current study provided useful information on investigations of infanticide cases. Although infanticide is

strictly defined as felonious homicide of children under one year of age, the data here also include cases in which the victim was over twelve months old but was referred to as an infant. However, such cases will be noted specifically. The chart below listed the number of infanticides and their causes of death, and in addition lists the number of cases in which the verdict was simply "found dead," meaning the jury was unable to discern if the cause of death was felonious homicide or a natural death.

The number of infanticide verdicts, including three victims older than one year and two of unknown age, revealed approximately equal numbers of males, eighteen, and females, sixteen. However, the number of cases listed as "found dead" showed a higher female to male ratio, thirty-three to twenty. This female preference is expected since many of these cases in doubt were due to infanticide. The most obvious points to be noted from the chart are the increasing ratio of "found deads" relative to infanticide in the last two periods, and that strangulation is listed as the most common form of infanticide. Perhaps, however, what is most significant is what the above data does not include. This study contained sixty-eight cases of "accidental" burns or scalds producing death. Nearly all these cases involved young infants. Despite this prevalence of "accidental" suffocation and burns, few, if any, of these cases were considered infanticide. Despite the widespread use of laudanum and other

INFANTICIDE

	Sex	?	UCU	Neg	CT	Ass	Drn	Suff	Str	Total	FD
1761-5	M	1*	1	1	--	--	1+	--	2	6	--
	F	--	--	--	--	1+	--	--	3	5	--
1800-3	M	--	--	--	--	1	1	--	--	2	--
	F	--	--	--	--	1	--	1	1	3	--
1835-8	M	--	1	--	1*	1	--	--	2	5	2
	F	1	--	--	--	--	--	--	2	3	7
1865-6	M	2	--	2*	--	--	--	--	1	5	18
	F	--	1	--	2	--	--	1	1	5	26
Totals	M		2	3	1	2	2	0	5	18	20
	F		1	0	3	2	0	2	7	16	33

*over twelve months of age
+age unknown
M - male; F - female; ? - cause of death unknown; UCU - umbilical cord untied; Neg - neglect; CT - cut throat; Ass - assault; Drn - drown; Suff - suffocated; Str - strangle; FD - found dead.

toxic agents, there were also no verdicts of infanticide from poison. Despite the frequency of deaths of infants over one year of age occurring in "baby farms" and for collection of burial money, few cases in this study were not newborns. Except for three cases of children definitely over twelve months of age and two of unknown age, all infanticide cases were newborns. Similarly, in cases listed as "found dead" all but two, one two weeks old and the other five weeks old, were newborns. Both cases of infanticide of unstated age occurred in the first period, 1761-1765, and involved a female who had been thrown into a "bog-house" (privy) and "assaulted," and a male "found drowned (murdered)." Also in the first period, there was a verdict of chance-medley (accidental homicide), which involved an "infant of sixteen years" playing with a "drawn sword" at the academy of Soho Square. This was the only individual over ten referred to as an infant. The other two non-newborn infanticides were an 1807 case of a man who cut his ten year-old son's throat and then cut his own, and a fifteen month-old male who supposedly died of criminal neglect. None of these cases contained medical testimony, except possibly the last case in which all depositions, including any medical testimony, were forwarded to the Old Bailey for trial. Missing depositions, forwarded to the Old Bailey, were not frequent in case of infanticide because rarely was the perpetrator known or prosecuted.

The question of infanticide was one of the most challenging for the medical practitioner both because of the prevalence of the problem and the difficulty in proving it. Guy outlined the proper procedure for carrying out a medical investigation in suspected cases of infanticide.

> 1. Examine the body of the child to determine its degree of maturity; for this purpose, weigh and measure it, ascertain the position of the centre of the body, and attend to the several points comprised in the description of the growth and development of the foetus.
>
> Note also any malformation that may be present.
>
> 2. Note the several circumstances by which the time that has elapsed since the death of the child may be determined, such as the presence or absence of animal heat and rigidity, the existence or non-existence of putrefaction, and, if putrefaction be present, the degree to which it has advanced.
>
> 3. Examine the entire surface of the body with a view to discover marks of violence, and, if any be present, determine whether they might have been produced during birth, or by accidental causes acting afterwards. Examine the mouth for foreign bodies introduced into it, and the fontanelies, orbits, heart, and nuchae, in search of wounds inflicted by pointed instruments. Note the state of the umbilical cord, measure it, and ascertain whether it has been torn or cut; and observe the condition of the skin.
>
> 4. Open the chest, and remove the heart, lungs, and thymus gland. Separate the lungs, and carefully inspect their surface. Observe whether they are of a uniform liver-colour and compact consistency throughout, or uniformly spongy like the adult lung, or mottled with developed aircells, as in imperfect respiration. If there are parts of a lighter colour than the rest, observe whether the texture of

> the lung is developed in those parts, and distinguish the developed cells from air the product of incipient or advanced putrefaction, by applying gentle pressure with the finger. In lungs free from putrefaction, the hydrostatic test may be resorted to, to ascertain their degree of buoyancy, as a rough measure of the quantity of air which they contain.
>
> 5. Examine the heart and foramen ovale; the ductus arteriosus and venosus; and the umbilical arteries and vein. Observe whether these parts are contracted, and to what extent, or obliterated; and whether they contain much or little blood.
>
> 6. Examine the stomach to ascertain whether the child has been fed, using for this purpose the tests for sugar, milk, and starch; if there is any appearance of inflammation in the alimentary canal, test its contents with a view to the discovery of poison. Note whether the intestine contains meconium and in what quantity, and whether the urinary bladder contains urine.
>
> 7. Examine the bones of the skull both at vertex and base, in search of fractures. Inspect the brain and its membranes, and note any effusion of blood or serum. Examine the spine with a view to the discovery of dislocation or fracture of the vertebrae.
>
> 8. Examine the suspected female in order to ascertain whether she has been recently delivered, and how long. In certain cases, inquire into the state of the woman's mind.[170]

In the autopsies that follow, it is obvious that many of these recommendations were followed in the nineteenth century.

As stated, all the remaining infanticides, twenty-nine cases, involved newborns, and in this chapter, cases of true infanticide will be discussed first, followed by cases judged

"found dead," and finally other important cases. There was only one autopsy performed in an infanticide case in the first period, 1765.

> Richard Ferrly, surgeon, on his oath saith that he examined the female child and found inflammation and tumor on the right breast by a stroke, and that the navel string was not tied, or taken any care of, but the after birth only cut from it. He says that the lungs of the said child were inflated, and floated entirely upon the surface of the water, which is an incontestable proof that the child was born alive.

Thus, the verdict was based on a scientific experiment that many medical personnel felt proved that a child had been born alive.

The hydrostatic lung test was the primary test during this period for live birth. The test entailed placing the whole and then separate parts of the infant's lungs in water. Since respiration causes air intake into the lungs and lowers the specific gravity, the lungs were expected to float if the infant had respired and sink if stillborn.[171]

This test was first used in the seventeenth century and was notable for being one of the first medical tests useful in medicolegal investigations. The test was proposed by Sonnenkalb[172] in 1561 in Saxony. The first application was by Johann Schreyer[173] in 1682 in Sileria, in an infanticide case.

Significant criticisms of the test developed as early as 1761,[174] and some of these were well outlined by William

Hunter in 1783. He pointed out that lungs may contain air without respiration secondary to putrefaction and artificial inflation. Most importantly, Hunter warned that even if these considerations have been accounted for, the test could not be expected to be infallible proof of murder.

> But the most dangerous and common error is supposing the experiment to have been fairly made, and that we have guarded against every deception above mentioned, we may rashly conclude that the child was born alive, and therefore must probably have been murdered; I will only observe, that in fair equity, it cannot amount to more than a ground of suspicion, and therefore should not determine a question, otherwise doubtful, between an acquittal, or an ignominious death.[175]

Guy later noted the possibility of false negative results, sinking even when the baby had lived, if the breathing had been only partial, due to significant atelectasis or in the presence of significant lung diseases. However, Guy claimed that if the lungs were fully inflated, then almost certainly the child had been born alive. Other tests of live birth were also studied by Guy and he elucidated their deficiencies. Forbes[176] mentions that the hydrostatic test presently is considered of dubious accuracy.

In the 1765 case mentioned above, the physician considered the test to be completely accurate. However, with the exception of that 1765 case, the test was not performed in any of the 1761-1765 or 1800-1803 autopsies. On the other hand, except where prevented by decomposition, the lung test was performed in the vast majority of 1835-1838

and 1865-1866 cases, and sometimes represented the entire examination performed.

Interestingly, another case in the first period, 1762, involved a male baby "born alive and left unattended in the street" who subsequently died. The verdict was murder. There was no significant medical evidence and it is unclear how the jury decided he was born alive. The only evidence provided was that there "was no stool in the diaper." Presumably the presence of stool would have added support that the baby had been born alive. Similarly, a 1765 murder case with a verdict of "choking and strangling" contained no evidence except the unsupported statement contradicting the verdict that "the infant was born alive with no marks of violence and the string was tied (umbilical cord)." These cases with so little evidence, no medical testimony, and apparent contradiction are difficult to interpret. Similar cases occurred later as well. In a second period inquest, 1801, a male was found in a ditch, and Samuel Partridge (an apothecary) was called to provide medical testimony. He examined the body without performing an autopsy and claimed the body was in a putrefied state with "no ligature about the navel. It is not possible to know whether he was born alive or dead." Nevertheless, the jury decided on "willful murder against person or persons unknown. The infant was placed in a water ditch in Belgrave Place and was drowned." While there was only a single autopsy in the

first period and none in the second period of this study, in the later two periods essentially every case of infanticide contained a post-mortem and medical testimony. Such completeness was not found in homicides and suicides. Perhaps this was partially due to the general difficulty of proving infanticide since most newborn deaths were without external marking, while the suspected suicide and homicide cases that were investigated rarely involved subtle methods.

Several cases of infanticide in the last two periods provide further information on the application of medicolegal evidence. The first was the only case (1835) of manslaughter rather than murder. It involved a single mother, who hid her pregnancy. The surgeon testified that he

> examined the state of the lungs and tried the usual test that of their sinking or swimming in water, they did the latter, from which I inferred the child might have been born alive, but this test, at best, is but a very fallacious one. Unfortunately at present we are not in possession of any accurate means of ascertaining this important fact. The impression of my mind is from the very healthy fine appearance of the child together with other anatomical appearances, there being no diseased state of viscera, that this child was born alive and if so it must have perished from loss of blood. . . the mother must have delivered herself.

The last statement was probably made because the cord was untied. Note also the careful discussion of the lung test. As with homicide verdicts, infanticide generally involved literally violent deaths. Neglect, such as failure to tie the cord, rarely was sufficient to deliver a verdict of

infanticide, probably because of the possibility that the infant might have been stillborn. Furthermore, textbooks of the day claimed failure to tie the cord of the infant, if it were born alive, in most cases would not be fatal.[177] Thus, this case of felonious homicide, though limited to manslaughter, was an exception, and in general an untied cord did not result in a verdict of infanticide. The above case and the following in 1866 were the only two "untied strings" to obtain a finding of infanticide.

> It is the body of a full term female child. It was in quite a healthy state, a very fine child. The navel string had not been tied. It had been cut by a sharp instrument. There was no mark of violence at all. The body had not been washed. The lungs presented a healthy appearance. On removing them and immersing them in water they floated. The lungs did not fill the chest. They were not fully inflated. The organs were all healthy. There is nothing to show the cause of death. I consider the deceased died from loss of blood. Neglect at birth. There was nothing in the stomach, no food had passed. Verdict: murder.

However, there was no evidence of hemorrhage as the cause of death other than failure to tie the cord. The absence of food in the stomach and none "passing" supposedly shows the infant had not eaten. Finding food would be evidence for having lived.

In several cases, adequate post-mortems could not be performed because of decomposition of the body. In an 1835 case in which an infant was found in a ditch with a small string around his neck, the surgeon

> found the child is so decomposed a state that I cannot give an opinion of the cause of its death or whether it had received any violence. From the size of the child it might be from one day to five months.

No autopsy was made. The verdict was "found dead under suspicious circumstances and supposed by the said jurors to have been murdered."

A few cases contained medical testimony that directly resulted in verdicts of infanticide. In one inquest in 1836 a police note stated that a baby was found still warm and nearby a young girl who had been crying was taken into custody. The surgeon testified that,

> after trying the usual experiments of ascertaining whether the child was stillborn or born alive, I found that it had been born alive. There were ligature marks around the throat and the parietal bone of the skull was fractured. I examined the girl in custody and ascertained that she is not the mother of the child in question. The navel string was cut the usual length and had been secured.

In an 1866 case the physician

> found bruises about the neck and mouth. The lungs were fully inflated filling the chest and small portions could be made to sink. The right side of the heart was full of black fluid blood, the left was contracted. I believe the child had fully breathed and the cause of death was suffocation.

Frequently when the right side of the heart was found to be full of blood, the surgeon would conclude that the infant died from suffocation. Other cases of suffocation were listed as "found dead" and presumably the physician acknowledging the fully inflated lungs and the neck and mouth bruises elicited this murder verdict.

As late as 1866 two cases decided, based on the hydrostatic lung test, that the children had definitely been born alive. "I applied the water test and had no doubt he had been born alive." In the second case the surgeon said,

> There was a wound in the back of the neck about two inches long completely dividing the spine. The lungs will prove whether he was born alive.
>
> A second surgeon stated that the navel string appeared tied. The lungs were fully inflated. The stomach never contained food. The wound caused instant death.

Again the fully inflated lungs were interpreted as indicating definite live birth.

As in other categories of felonious violent death, medical evidence varied greatly in cases of infanticide. As mentioned, the total absence of medical testimony in most of the 1701-1705 cases, "found in the pond drowned," slowly evolved to frequent medical depositions without autopsies in the 1800-1803 period, "There was a mark on the left side of the throat and umbilical cord untied." Testimony progressed in the later two periods and consistently contained at least limited post-mortem examinations, if only to apply the hydrostatic lung test. Still, within the last two periods, standards varied greatly. A particularly thorough autopsy involved a female infant in 1865:

> a fine child of full period gestation. It was in a state of decomposition. The face was flattened and swollen and the tongue protruding. I could not make out any mouth. The funis was torn off clear of the body. A small quantity of fresh blood about the face. I made a post-mortem

> on the body. On dividing the integuments there was a great deal of blood. The lungs were fully developed and healthy. I have no doubt the child was born alive. The lungs floated in water. The heart was natural. The liver was very much decomposed. A quantity of bloody serum escaped on opening the head. There was no mark of violence. I cannot say from what the child died. It had the appearance of a drowned child. Suffocation might cause this appearance. I think the child died by foul means. The symptoms I saw could not be produced accidentally.

The child was considered born alive in 1866 because of the lung test, yet decomposition and putrefaction had long been recognized to give false positive results.

Information can also be gained from the cases considered "found dead" where the jury was unable to determine a verdict between murder and natural death. It is again worth noting that the verdict "found dead," was reached only in the later periods; in the 1761-1765 and 1800-1803 periods, verdicts on the infants were limited to infanticide, accidental, or natural death. These cases of "found dead," even those with medical testimony, generally concluded with the finding, "cause of death unknown" or "cannot tell if born alive."

In several "found dead" cases, it seemed murder would be the likely verdict, since there often existed stronger evidence here than in many of the early infanticide cases. The strong hesitancy of juries in these later years to reach a verdict of murder, even when the perpetrator was unknown,

is evident in the number of cases "found dead." It is difficult to ascertain how the jury differentiated between murder and some of the "found dead" cases examined below.

An 1865 newborn female was

> decomposed. The cord was not tied. There was a deep groove around the neck with bruised marks caused by the application of a ligature before death or immediately afterwards. Both lungs partially inflated and sank with great difficulty when placed in water. The right side of the heart contained black fluid blood, not clotted. I infer the child partially inspired but cannot say whether it had fully lived.

Comparison of this case to infanticides mentioned earlier with similar evidence points out the unexplained variability in verdicts. In another 1865 case,

> the head and face were bruised. There were lacerations on the chest not made by any instrument but perhaps by clumsy handling. The cord was not tied. The bruises I think were inflicted during life. The brain was greatly congested. The right side of the heart was full, and the left empty. Both lungs were inflated. Their vessels had blood, and the lungs had to be destroyed before they would sink in water. The stomach was empty. I believe the deceased had breathed and lived. The bruises were inflicted during life and death was by suffocation.

The jury concluded, "suffocation, no evidence how." Again, with the described bruises, it is hard to understand why the verdict was not murder as in similar infanticide cases.

The next two cases, in which the juries force surgeons to retract evidence in support of murder, even more

strongly question the attitudes of the particular jury. A single, twenty-one year old woman delivered in 1836 and Mr. French deposed,

> that the child has arrived at about the full period of utero-gestation. The child was born alive and that death was occasioned either by suffocation or by violence to the head, in which case it might have died from apoplexy. The skin was not injured but thro' the skin the fingers could ascertain a semi-circular ridge in the situation of the right parietal bone extending partially across the left which gave the idea of a fracture. The bone at this period of life is not in a brittle state and therefore was not so decidedly fractured as a perfectly ossified bone would be under a fracture condition, but on denuding the bone entirely of its coverings it was as much fractured as such a substance is capable of being fractured. I have examined the person of Ann Middlebrook now in this work-house and I am of the opinion that she has recently been delivered of a child.

Despite this extensive discussion of the skull fractures, the jury, unwilling to render a verdict of murder, recalled Mr. French and questioned him. He testified that "it is quite possible that the fracture might have taken place after death. There is no direct proof of the mother having used violence." The second case was one of the most fascinating studied. In this 1866 suspicious and somewhat comical case, both a midwife and surgeon testified, and the jury absolutely refused to make an indictment for murder.

> /The midwife/ saw there a young woman sitting on a chair. I asked her what was the matter with her. She said nothing. She persisted in saying there was nothing the matter. I asked her if she had miscarried. She said no. I asked her if she had been pregnant, if she had been confined. She said no. Her mother

requested her to let me examine her but she refused. After great persuasion she said if she was allowed to go into another room and take off her drawers she would consent to be examined. I examined her and withdrew the placenta. She said oh dear what is that you have taken from me. I said an after birth. I said where's the child. She said she had not had one. I said you must have been delivered. She said I have not. I then called her mother in and showed her the placenta but the girl still persisted she had not had a child. I then left. In about two minutes I was called back and in a box which the mother showed me I saw the deceased child. It was folded up and tied in a piece of colored apron or calico. The bundle was tied tight. There was also a piece of calico tied around the neck. I untied it. I can't say whether it was tight or not.

/The surgeon testified/ when I got to the house I saw Julia Bennett sitting by the fire and her mother said she was in great grief and had been confined of a child. The mother said I am very sorry for what has taken place. The deceased child was brought wrapped in two cloths, both of which were saturated with blood. The body of the child was unwashed and stained with blood and mucous such as would be about the body of a new born child. The umbilical cord was about three inches long and torn and there was no ligature at all about it nor had there been. There was the mark of a ligature around the neck, an ecchymosed mark. The tongue was protruding. The pupils were dilated. The arms and legs were both contracted.

It was a male child of full term. The body weighed exactly seven pounds. It measured twenty inches in length. The full round the chest was twelve inches. I first opened the chest. It was well rounded and filled up. The lungs were fully inflated filling up the whole cavity of the chest. They were of a bright pinkish hue and crepitant under presure. I opened the peridardium and found the right side of the heart full of dark blood. I removed the whole of the heart and lungs

> together with the trachea and the esophagus. I placed it in water and it all floated together. I afterwards divided the lungs into different portions and they all floated. Blood oozed from the incision of the lungs and air escaped. The stomach contained about an ounce of mucus. The colon was full of meconium. The bladder was full of water. I then opened the brain. Upon dividing the scalp about half an ounce of dark blood flowed out. Upon opening the skull about an ounce of blood or more flowed out from the brain. The whole of the vessels of the brain and the sinuses were very much congested and one or more of the sinuses must have been ruptured.
>
> I am of the opinion that the child lived and died partially from the effects of strangulation and partly from the effects of hemorrhage from the navel cord. I believe the child must have been fully delivered before its death. The mark around the neck was perfect all the way round.

Thus, there was evidence for a strong indictment of murder based on the medical testimony. However, because of the jury's reluctance to render a murder verdict, the surgeon was recalled and raised doubts about the cause of death.

> The child might have breathed sufficiently to have caused the lungs to float before leaving the mother. The protrusion of the tongue might be produced in the course of an ordinary labor and before the birth of a child. In giving my opinion that the child must have been fully delivered before its death, I was influenced by the quantity of blood I observed in the cloths in which the child was wrapped and that that blood came from the navel string. The ecchymosed mark round the neck might have been caused by the ligature being applied before the birth of the child, or within two or three minutes after the death.

Two cases of suffocation were noteworthy. An 1835

eight week female "was found dead in bed between her mother and father." The surgeon said, "the child was normal except the lungs and brain were congested. The heart was empty and collapsed. She died from suffocation." The surgeon apparently visited the house and testified that "the stench in the room was obnoxious and quite sufficient to asphyxiate any child. The bed is designed for one, not for four people who were sleeping in it." The other case occurring in 1836 was unique because within the inquest was a copy of an eight by eleven published poster of a reward offer (appendix) by the Parish of St. George, Hanover Square, of ten pounds for "information as may lead to the conviction of the guilty party" in the death of a newborn male child found dead and "supposed to have been murdered." The surgeon testified in the case after performing a detailed autopsy:

> I examined the body of the child yesterday. It might have been dead from 36 to 48 hours, but not more, for there was no sign of commencing decomposition. The delivery must have been rapid, as the head was not much congested nor the scalp swollen.
>
> 1. The child was born about 14 days before the full term, or between that period and the end of the 8th month because the half of its length reached to one inch above the umbilicus. This is also further confirmed by the child weighing 5 lbs. 10 oz. avoirdupois and measuring 18 3/4 inches in length.
>
> 2. The child was born alive. 1. because the lungs were in several parts crepitous, of a bright crimson colour and rounded at their edges. 2. they weighed 635 grams. 3. they floated in water even when cut in pieces and

> prepped. 4. the diameter of the pulmonary artery was to the arterial duct as 19 to 11.
>
> 3. It lived a very short time only, not so long as to allow the lungs to be fully expanded so that one was very dark coloured and solid weighing nearly 100 grains less than the other.
>
> 4. There was no apparent cause of death found internally nor was there any mark of external violence whatever. The umbilical cord had been cut at the distance of 6 inches from its attachment to the child. No ligature had been placed around it but the quantity of blood in the body showed that the death was not occasioned by bleeding. There was no frothy fluid or other substance in the mouth or air passages. Yet, the child having once commenced to breathe being well formed and in every respect perfectly organized, and taking all the circumstances into consideration, it appears highly probable if not certain that the death was occasioned by the access of air to the lungs being prevented.
>
> This opinion is supported by the state of the lungs and great blood vessels of the right side of the heart which were much distended with blood.

The surgeon's opinion was again based on the lung test but the surgeon was also impressed by the fact that the right side of the heart and pulmonary arteries were filled with blood. Over and over in the autopsies, such evidence was considered to indicate suffocation in the belief that if air were denied the lungs, blood would be unable to pass through the lungs and would fill the right side of the heart. Despite the surgeon's testimony and the poster's proclamation of murder, the jury failed to be convinced and insisted "found dead from suffocation."[178] The jury's hesitancy to convict a woman of murder is perhaps understandable and humane, but at the same time, made infanticide an almost

unpunishable offence. The poster offering a reward for useful information, and the surgeon's efforts to criticize the overpopulation bed as a health hazard were the only evidence that the public was concerned with infanticide and with the quality of life of these infants. Such attitudes are welcome signs of social advancement, finally giving some value to the life of the infant.

Aside from the "found dead" verdicts, there were other cases raising the question of infanticide. Only three were termed overlaid. All three, one each in 1835, 1836, and 1865, contained no post-mortem examinations; and only one (1835) had medical evidence, which stated only that "the baby's face, right side and fingernails were livid, and the death appeared to be such as would be produced by any obstruction to the entry of air into the lungs." Certainly as already mentioned, the coroner did not see all cases of overlaying, and probably not even most. The lack of aggressiveness in these cases probably reflects recognition of the impossibility of differentiating intentional from accidental suffocation, and even with an autopsy, there would be no distinguishing signs to prove or negate overlaying.

Based on medical testimony, two cases of questionable infanticide were termed natural death. One was a five week old male (1865) found dead in bed.

> The heart was malformed from birth. This might produce sudden death at any time. All other organs were healthy. He died a natural death from congenital malformation of the heart.

Such a finding should reinforce the need for an autopsy, even in cases of overlaying. The other case was a newborn female (1835).

> I examined the body of the deceased child. There were no external marks of violence whatever but the labour was most probably a difficult one from the shape of the deceased's head. I opened the body. On cutting through the walls of the chest a quantity of water escaped, about a large wineglass full. We took the lungs out of the chest and examined them. . . and we are of the opinion that the quantity of water in the chest had prevented respiration from being fairly established. We went into a more particular examination of the body and upon the whole we think that the child was not born alive and certainly there were no visible means having been used to deprive the deceased of life. . . The navel string was not tied from which I conjecture the mother had not been attended by a Midwife but had she been she certainly could not have preserved the life of the Child. It was full grown. There was no blood in the heart which is proof that the child had never fairly breathed.

While these two cases suggested acquittal based on medical testimony, two other cases listed as natural death ignored serious questions of neglect. One (1837) involved the newborn infant of a single female.

> The child died a natural death within 12 hours of her birth and the death was occasioned by gross neglect on the said mother's part but under fright and being taken by surprise. She had not tied the navel string.

Perhaps the woman was freed because she was the servant to a surgeon who found the infant, cleaned it, and tied the cord. Clearly, the jury accepted Hunter's liberal definition of acceptable neglect from emotional upset. The second case involved an eight week old infant "ailing from diarrhea" in

the care of a day nurse. A midwife attempted to obtain a certificate of death from a Mr. Pearce, but he refused because he wanted the child examined by a medical man. A policeman called James Hunt (surgeon) to see the child. Hunt said,

> the child was extremely emaciated. The body weight 4 1/2 pounds. The organs were perfectly healthy. There was food in the stomach. The mesenteric glands were somewhat enlarged. There was inflammation of the bowels, and scarcely a particle of flesh upon its bones resulting from want of breast milk. The child died a natural death from atrophy arising from want of breast milk.

A midwife also testified that the "mother went to a family in Cornwall four weeks ago. The mother could not suckle it." One wonders if the dry nurse was not indeed one of the dreaded "killer nurses."

Inquests were also held on a pair of suspected poisonings with opium preparations. In an 1838 case the surgeon testified:

> The child was in a comatose state with respiration very difficult, could scarcely swallow and I considered it could not survive. I tried every thing but without avail. I stopped about an hour after, and twice afterwards tried again but she died about 10 in the night of that day. The child was 7 weeks old. I attended her mother at the birth. It was a perfectly healthy child. The deceased aunt is confined by illness in the same house and I had her under my care. On account of the state of the deceased's bowels I told the parents they might give her some castor oil. I did not send that. About three weeks previously I had send medicine for the child's uncle. This medicine contained sulfuric acid and 20 drops of this mixture would occasion the death

> of an infant of the age of the deceased. I am of the opinion that the deceased died from having a large dose of the before mentioned mixture. The parties before mentioned are sober people. Verdict: accidental death from wrong medicine given.

The second possible poisoning was a detailed case involving in 1865 a two month old female daughter of an unmarried servant. This case also raised the question of malpractice.

> /Dr. Norris, surgeon, testified/ I was called and found her dead and quite cold. I should say she had been dead about an hour. No external appearance to account for death. I have made a post-mortem examination. I examined her head and found her vessels highly congested and somewhat softened. I opened the chest and found lungs vascular and the back part consolidated. The heart was flaccid and an increased quantity of serum in the pericardium. Liver healthy, kidney healthy, stomach and intestines healthy.
>
> The whole of the body emaciated. I believe it had had opium and it would have the effect in so weakly a child as producing the vascularity and render the child unable to receive nourishment from its food. I consider that the cause of the death was from congestion of the lungs accelerated by the administration of opium.

There was a note signed by members of the jury telling the coroner to "issue an order for the examination of Francis Hind as a medical witness on the inquest. . . the medical evidence not being satisfactory." Francis Hind, surgeon, was summoned and deposed.

> The prescription produced is in my writing. There were 3 powders. Each powder to contain 2 grains of grey powder, 1 grain powdered rhubarb and one grain of Dovers. One tenth part of Dovers powder in each powder contains

opium. There would be 3/10 of a grain of opium in the 3 powders. The paper had not been registered nor had it my name. She must have come late or the paper would have been registered. A prescription like this would be given for a crying child and one vomiting its food, and for deficient action of the bowels. I have no recollection whatsoever of the particular case.

There is no case upon record of a dose such as this producing any poisonous effect upon a child. I would say that there is no symptom that the child had taken opium so as to influence it poisonously. A child would be as tho' it were dying, stupid, torpid, unable to take food and not able to raise itself. A child has never been poisoned by the direct action of opium administered at a longer interval than 24 hours previous to death.

I do not at all agree with the statement made by Mr. Norris that the effects of administering opium such as that as was given by the prescription would have the effect in so weakly a child as producing the vascularity and to render the child unable to receive nourishment from its food, such an interval of time elapsing between the administration of such a prescription would not have the effect in so young a child as preventing the child receiving nourishment.

I consider that the cause of death was from congestion of the brain and lungs unaffected by the administration of opium. The change of the breast from the mother to the gruel would account for everything. The average mortality of children brought up in this way is 2 out of 5. I have prescribed that prescription more than 1000 times but never with any fatal results.

Mr. Norris then testified again attempted to make amends with Francis Hind.

I am satisfied that the death was the result of congestion of the brain unaffected by the administration of opium. The child was in an unhealthy situation which would tend to produce that vascularity of the brain and lungs.

> Verdict: Natural death from congestion of the brain and lungs unaffected by the administration of opium.

Besides the controversy raised and the question of malpractice, this case serves as a classic example of the type of case referred to in the writings on the medical witness in the second chapter. The conflict between the surgeons and the reversal of testimony were example of conduct which diminished the reputations of the surgeons involved and the field in general.

Enormous strides were made over the period studied, and the last case to be mentioned involved a one year old in 1837. This case is consistent with sudden infant death syndrome, but more important, is noteworthy for being the most complete post-mortem examination in the entire study, and a goal that ideally would have been equaled in many instances.

> On the left arm, three striped indications of a recent burn the surface being imperfectly cauterized; on the chest a large oval red mark the circumference of which is well defined. The integuments over the cartilaginous borders of the ribs discolored by incipient decomposition, the posterior part of the trunk and extremities purpled by the gravitation of blood.
>
> Chest: Lining membranes of the cavities and the lungs quite healthy. Heart: Both cavities of the right side flaccid and empty, left auricle full of black coagulated blood, left ventricle empty, and contracted so poorly as to exhibit on a transverse section of it being made, scarcely any vestige of its cavity.
>
> Pharynx: Mucus membranes opposite the nares, pale, that portion of it indenting the face and back part of the epiglottis, the back of the larynx, and the pharynx opposite to the mouth

highly congested with venous blood. This purply redness abruptly terminates on a level with the base with the arytenoid cartilages.

The esophagus, below the above named annular discoloration, pale, but, at the point where the trachea bifurcates, venous congestion again prevails, but not in such excess as in the pharynx.

The larynx: Mucus membranes of the interior congested. That of the trachea, pale and healthy; the right bronchus and its division congested in the lining membrane. That of the left, scarcely, if at all, affected. The interior of the air tubes unimpeded; substances of the lung healthy, their posterior quarters being merely engorged by the blood.

Abdomen: The investing membrane of the cavity and its viscera quite healthy. Mesenteric glands, enlarged and clustered but not indurated. The mucus lining of the whole digestive tube, pale and healthy; the stomach and small intestine contain a thick, opaque fluid, resembling strained oatmeal, gruel. The large intestine contained a small quantity of yellow feculent matter.

Brain: Vessels of the pia mater gorged; substances of the brain healthy; cavities empty; pons varolii and the medulla oblongata enveloped in a mesh of engorged veins. Substances of the cerebellum injected.

Mouth: Lining membrane healthy to the fauces when it becomes congested. The incisors, cuspidati, and anterior molars of the lower are completely through. The same teeth of the upper jaw exist with this difference, that the point of the cuspidati are peeping through the gum, the bodies of the teeth being still involved in that structure.

The contents of the stomach and the intestines have been examined carefully today and analyzed. There is no poison or preparations of opium or other narcotic discovered. I am of the opinion that the deceased died from natural causes.

Through the century, infanticide was very common. With this in mind, it is remarkable that there was such a small number of infanticide verdicts; and the growth in "found dead" verdicts makes clear the jurors' fear of condemning a woman for disposing of an unwanted infant. Brend comments that throughout Great Britain, "juries frequently find that a child was stillborn, in the face of the clearest medical evidence to the contrary, in order to save an unmarried mother from being charged with murder or manslaughter."[179] The laws and the social upheaval of the times forced upon the coroner's jury the difficult choice between concern for the young mother and concern for the innocent child. The failure of the system was evident in the frustrated verdict, "found dead."

CONCLUSION

The inquest, the basis of medicolegal investigation into violent and unknown causes of death, affords a sound perspective for evaluating the success with which forensic medicine principles were implemented. Studying this period is particularly significant because it was the era to which English forensic medicine owes its origins and much of its early progress. Though the literature documenting the early science is readily available, its contemporary application had not been researched and constitutes an important historical topic as well as a relevant subject to the community of its day. This thesis provides insight into the early views on providing medical testimony, the frequency of its application, and, in numerous examples, the quality of that testimony. The service rendered to the inquest by medical expertise was essential to elucidate cases of possible homicides, suicides, and infanticides. There were many shortcomings to the medicolegal system, and social awareness as well as legislative reform largely began in the latter half of the nineteenth century, taking full form after this study was concluded. These inquests thus represent the application of early principles not yet firmly established and still evolving.

As mentioned, with the exception of Bailey and Forbes, there exist no studies of coroner's inquests including depositions for this era. Only one of Bailey's sixty cases contained any medical evidence and Forbes' study of over 6000 inquests emphasized the vital statistics in those documents. This is the first study to evaluate the quality and quantity of medical testimony and to provide numerous examples for study. As clearly demonstrated, medical evidence was remarkably variable and sometimes entirely subverted. However, in general, medical evidence and post-mortem examinations, disregarding the accuracy of the contemporary medical knowledge, advanced from the relative scarcity early on to many later cited examples of excellent, occasionally outstanding, efforts to apply medical expertise to the search for justice.

APPENDIX

Burial order: under a public highway: 180

No. 7.

To the Churchwardens and Conſtables of the Pariſh of St Margaret in the City and Liberty of Weſtminſter, *in the County of* Middleſex.

City and Liberty of *Weſtminſter*, in the County of *Middleſex*, (to wit.)

WHEREAS by an Inquiſition taken before me, His Majeſty's Coroner for the ſaid City and Liberty of *Weſtminſter*, in the County of *Middleſex*, this fifteenth Day of December in the forty ſecond Year of the Reign of His preſent Majeſty King George the Second at the Pariſh of St Margaret in the ſaid City and Liberty of *Weſtminſter* and County of *Middleſex*, on View of the Body of Mary Wilſon then and there lying dead: The Jurors, in the ſaid Inquiſition named, have found that the ſaid Mary Wilſon feloniouſly, wilfully, and of her Malice forethought, killed and murdered her ſelf. THESE are therefore, by Virtue of my Office, to will and require you forthwith to cauſe the Body of the ſaid Mary Wilſon to be buried in ſome public Highway, and thereof to certify to me the Place, and for your ſo doing, this is your Warrant.

Given under my Hand and Seal, this fifteenth Day of December One Thouſand eight hundred and one.

Anth. Pelle Coroner

Certificate of death:[181]

The REGISTRAR of the SUB-DISTRICT in which the DEATH took place.

I hereby certify that I attended Jane Bernard Ann aged 38 last Birthday; that I last saw her on July 2nd 1865 that she died on July 3rd at 11 Little Grosvenor St and that the cause of her death was

	Cause of Death	Time from attack till Death
(a) First	Haemorrhage & Abortion.	*
(b) Second	Caused by Assault	*
	Injury & Violence	

Signed W Gilbert Ann

Prof. Title Mr D

Address 6 Mount St

Date July 3rd 1865

* Each form of Disease, or Symptom, is reckoned from its commencement *till Death*.

Printed by FOUD and TUAT, 32, Long Acre, London.

Infanticide penalties:[182]

Women Found Guilty of Infanticide in Great Britain
And How Courts Dealt With Them

Years	Recognisances or discharge	Probation	Imprisonment	Other[a]	Total (=100%)
1923–27	42.4%	5.1%	49.1%[b]	3.4%	59
1928–32	34.4%	18.1%	42.6%[c]	4.9%	61
1933–38	44.0%	22.7%	33.3%	Nil	66
1939–45	No statistics published				
1946–50	24.4%	49.0%	22.3%	4.3%	139
1951–55	15.0%	55.0%	16.2%	13.8%	80
1956–60	9.5%	76.2%	3.2%	11.1%	88
1961–65	5.0%	68.1%	1.3%[d]	25.0%	72

a Most of these cases were no doubt committed to institutions for mental defectives or more recently to mental hospital. In 1964 and 1965 the published statistics made it clear that all women not dealt with by discharge, probation, or imprisonment were dealt with by hospital orders.
b In 1923 one of these women was sentenced to 4 years penal servitude another 3 years penal servitude.
c One of these women was sent to a borstal.
d She was sent to prison for 6 months or less.

£10 REWARD.

PARISH OF
St. George, Hanover Square.

WHEREAS,—A NEW BORN

MALE CHILD

was found Dead about Two o'Clock this Morning at the Step of the Door of Grosvenor Gate Lodge, inside Hyde Park, wrapped up in two pieces of Printed Cotton. And WHEREAS the said Child is supposed to have been MURDERED, as it appears to be full grown, and born alive.

THIS IS TO GIVE NOTICE, that the Governors and Directors of the Poor of the above mentioned Parish, hereby offer a Reward of TEN POUNDS, to any Person or Persons who will give such Information as may lead to the Conviction of the guilty Party.

Signed,

T. B. CHAPPELL,

Board Room, Mount Street,
January 28th 1838

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Chemical analysis by Alfred S. Taylor.[184]

Report of Analysis in the Case of Jane Anne Clark.

A jar containing portions of the viscera of deceased, properly secured, was delivered for analysis at the Chemical Laboratory Guys Hospital., on Friday morning July 28th 1865.

On removing the coverings of the jar it was found to contain / The stomach which had been laid open, / Two Portions of the Intestines / The Liver and / One Kidney which had been laid open through its centre.

These parts were carefully examined soon after they were received. The stomach and intestines were black and highly putrefied. The membranous coats of both were distended with bladders containing the gases of putrefaction. These parts were so changed that it was impossible to form any idea of the appearances which they presented soon after death. The liver and kidney were putrefied, but in a less degree. They presented no appearance of disease

The question submitted to me in this case was — to determine by chemical analysis whether there was any mineral poison in the viscera especially whether they contained any compound of arsenic or antimony. The putrefied state of the organs would not in any way interfere with the discovery of mineral or metallic poisons generally; and of antimony and arsenic in particular they are as easily found, when present, in putrefied as in recent organs. Putrefaction only affects the appearances left on the body by poison or disease; it does not remove or destroy the poison.

The greater part of the Stomach with portions of the intestines, liver and kidneys, were cut into small pieces and submitted to the usual chemical processes for the detection of poison, especially of antimony and arsenic; and the various methods employed all concurred in showing that there was no mineral or metallic poison present in any portion of these viscera.

The parts sent for analysis were judiciously selected for the solution of this question — the presence or absence of poison. Since if mineral poison had been taken by deceased shortly before her death some portion of it would have been found in the stomach or intestines, while if any such poison had been taken by her some weeks before her death then traces of it would have been discovered in the liver or kidneys, in which organs mineral poison is deposited and retained for two or three weeks or longer after the last dose has been swallowed. Thus it is frequently found in cases of death by these organs, when it is no longer present in the stomach or intestines.

The conclusions which I draw from this analysis are

1 That there was no antimony arsenic or other mineral poison present in the viscera of the deceased

2 That as no traces of antimony or arsenic were contained in the livers or kidneys, there is reasons to believe that deceased had not taken a dose of either of these poisons for some weeks before her death

3) That as either poison (if taken) would

not have been entirely expelled from the body at the time of death, there is nothing chemically speaking to show that deceased suffered or died from the effects of poison

I may observe that the peculiar appearances of congestion & observed by Dr Standley in the stomach and intestines of deceased are such as virulent poison occasionally produces, but similar appearances may also arise from morbid causes. Until an analysis of these parts has been made it is impossible for a medical man to form an opinion of the cause of death. The chemical results in this case are such as to justify the conclusion that the deceased did not die from the effects of virulent poison.

Parts of the viscera have been reserved in case any further experiments should be required for the satisfaction of the coroner and jury

Alfred Swaine Taylor M.D. F.R.S.

Professor of Chemistry and Medical Jurisprudence in Guy's Hospital. Fellow of the Royal College of Physicians &c

15 St James's Terrace

Regents Park July 31. 1865.

FOOTNOTES

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41. Ibid., p. 29.

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104. Roland Bartel, "Suicide in Eighteenth Century England: The Myth of a Reputation," Huntington Library Quarterly, 23, 1959-60, pp. 145-158.

105. Edward Umfreville, Lex Coronatoria, London, 1761, pp. 4, 445.

106. P. E. H. Hair, "Accidental Death and Suicide in Shropshire, 1780-1809," Trans. Shropshire Archeol. Soc., 59, p. 66.

107. Forbes, "What Disease," pp. 416-417.

108. William Battie, A Treatise on Madness, London, 1758, 36-37.

109. Rosen, p. 23.

110. Hair, "Shropshire," p. 73.

111. Rosen, p. 24.

112. Havard, p. 57.

113. Forbes, "Crowner's Quest," p. 37 found about half of both sexes died by hanging.

Hair, "Shropshire," p. 66 also about half of each sex died by hanging, with most of the rest dying from drowning and throat cutting.

114. Forbes, "Crowner's Quest," p. 36.

115. P. 53.

116. Guy, pp. 292-294.

117. Robert Christison, A Treatise on Poisons, Philadelphia, 1973, p. 198 (first printing 1829).

118. Christison, p. 218.

119. Guy, 270-277.

120. Notice from the police:

Jane Clark aged 14 was admitted to St. George Hospital on the 19th day of July and died the 20th. A post-mortem has been made and it appears there is a suspicion of poisoning.

121. Christison, p. 472.

122. As mentioned previously, though somewhat inconsistent the inquests generally referred to children less than age ten as infants. However, by definition, infanticide included children less than twelve months of age. The twelve month definition of infanticide was made official in the Infanticide Act of 1938. Damme, pp. 8 and 16.

123. Asen Balikci, The Netailik Eskimo, New York, 1970, Chap. VII.

124. Langer, "Infanticide," p. 354.

125. W. W. Tarn, Hellenistic Civilization, 3rd ed., Cambridge, 1952, pp. 100-102.

126. John B. Beck, Researches in Medicine and Medical Jurisprudence, New York, 1835, pp. 11-12.

127. William L. Langer, "Infanticide: A Historical Survey," Hist. Childhood Quart., 1, 1974, p. 355.

128. Catherine Damme, "Infanticide: The Worth of an Infant Under Law," Med. Hist., 22, 1978, p. 3.

129. Damme, p. 3.

130. John R. McNeil and Helena Gomer, Medieval Handbook of Penance, New York, 1938, p. 254.

Barbara A. Kellum, "Infanticide in England in the Later Middle Ages," Hist. of Childhood Quarterly, 1, 1974, p. 369.

131. Kellum, p. 369.

132. F. M. Powiche, Councils and Synods with Other Documents Relating to the English Church, 2, 1205-1265, Oxford, 1964, pp. 136, 214, (Trans. Damme).

133. Damme, p. 4.

134. Forbes, "Homicides," p. 211.

135. Mary M. McLaughlin, The History of Childhood, New York, 1974, p. 157 n. 105.

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137. McLaughlin, p. 120.

138. Ibid., p. 157 n. 105.

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140. Langer, "Infanticide," p. 357.

141. F. G. Emmison, Elizabethan Life: Disorder, Chelmsford, 1970, pp. 155-156.

142. Damme, p. 11.

143. D. Saborline Davis, "Child Killing in English Law," Modern Law Review, vol. 1, 1937, p. 213.

144. J. W. Jeudwine, Observations on English Criminal Law and Procedure, London, 1968, p. 127.

145. Guy, p. 79.

146. J. B. Morgagni, The Seats and Causes of Disease, (trans. by B. Alexander), New York, 1960, pp. 536-537.

147. William Hunter, "On the Uncertainty of the Signs of Murder in the Case of Bastard Children," Med. Obs. Inq., 6, p. 269.

148. W. Hunter, p. 286.

149. P. E. H. Hair, "Homicide, Infanticide, and Child Assault in Late Tudor Middlesex," Local Pop. Studies, 9, p. 44.

150. Langer, "Infanticide," p. 357.

151. William L. Langer, "Checks on Population Growth: 1750-1850," Scientific American, 226, 1972, p. 96.

152. State of Large Towns, R. Comm. 1st Rep.: 1844, (572) xvii, Minn. of Evid. 3237-3321.

153. The quote is from Thomas Coram, a retired sea captain, who devoted seventeen years to the establishment of a foundling hospital in London. Langer, "Infanticide," pp. 358-359.

154. John Brownlaw, The History and Design of the Foundling Hospital, London, 1868, p. 14.

155. Daily Telegraph, September 10, 1862.

156. J. Hogg, London As It Is, London, 1837, pp. 45, 76-77, 162.

157. Jeudwine, p. 128.

158. Mins. of Ev. 1446, p. 69.

159. Joseph Kay, The Social Condition and Education of the People in England and Europe, London, 1850, vol. 1, p. 433.

160. Havard, p. 52.

161. William B. Ryan, Infanticide: Its Law, Prevalence, Prevention and History, London, 1862.

162. Mins. of Evid., 625-6, p. 21.

163. Havard, pp. 71-72.

164. William Baker, Office of the Coroner, London, 1851, pp. 125-126.

165. Dutch Certification, Sel. Cttee. 2nd Rep.: 1893, (402) xi, 195, p. xxiii.

166. Langer, "Infanticide," p. 361.

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171. Robert P. Brittain, "The Hydrostatic and Similar Tests of Live Birth: A Historical Review," Medico-Legal J., 31, 1963, p. 187.

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175. Hunter, p. 285.

176. Forbes, "Crowner's Quest," p. 47.

177. Guy, p. 117.

178. For discussion of subtle illnesses possibly interpreted as "death from suffocation" or overlaying see:

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179. Brend, "Statistics," p. 51.

180. Enclosed in inquest dated 12/14/1801.

181. Enclosed in inquest dated 7/5/1866.

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183. Enclosed in inquest dated 2/2/1836.

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